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Chloroform in Delirium Tremens: a Reply to Dr. Richardson. By J. W. Barstow, M.D., Resident Physician of Sanford Hall Asylum, Flushing, L. I., late Assistant Physician in the Penitentiary Hospital, Blackwell's Island, New York City.

In the October number (1856) of the *American Medical and Surgical Journal*, published by Dr. Isaac Hays, of Philadelphia, appeared an article entitled, "*On the Treatment of Delirium Tremens by Chloroform.* By W. R. Richardson, M.D., late Assistant Physician in the Hospital, Blackwell's Island, New York City." The paper professes to be a critical reply to an article, written *more than three years ago*, by Dr. Wm. M. Chamberlain, of Astoria, L. I., entitled, "*Chloroform in Delirium Tremens: a Report of Ten Cases*," &c., and published in the American Medical Monthly for March, 1854.

The endorsement which Dr. Richardson's paper received from the fact of its publication in a journal of such acknowledged repute as the *American Medical and Surgical*, may well be accepted by the

casual reader as prima facie evidence of its title to credit; while those who are familiar with the facts and incidents and persons involved—who have read Dr. Chamberlain's report, and recognized in their own experience the truth and the value of his observations—above all, those who shared with him the advantages which the Hospital afforded, and witnessed with him the progress and results of the very cases which he reports—can well be excused from assenting to the unproved assertions, broad misrepresentations, and personal discourtesies with which Dr. Richardson's professed criticism abounds.

I had the honor to be a member of the late Dr. Wm. Kelly's staff, during fourteen months of his able residency in the Penitentiary Hospital, and for four months I had charge of the Delirium Tremens wards (male), under Dr. Kelly's supervision.

The cases which Dr. Chamberlain reported, all occurred during my term of service on the Island. With most of them I was familiar, and of two I had at some time personally the charge. I therefore claim the right to reply to such parts of Dr. Richardson's article as conflict with my own experience of facts, with my sense of what is just to the memory of a dead teacher and the claims of a living friend, as well as of what is decorous and becoming in a man who has occupied Dr. Richardson's position.

The *animus*, as well as the details of Dr. Richardson's paper, have been carefully studied, and I make no apology for charging his criticism with misrepresentation and discourtesy, and with a reckless looseness and carelessness in stating minutiæ, unworthy of one who values the sacredness of truth or his own credit as a professional observer.

With a view to sustain this charge, let us review Dr. Richardson's paper *ab initio*—glancing first at his preface, and then taking up his report of cases, compare it with Dr. Chamberlain's, case by case.

Dr. Richardson begins as follows: "A Report of the successful treatment of ten cases of Delirium Tremens with Chloroform, &c., by Dr. W. M. Chamberlain, appeared in a recent number of the N. Y. MEDICAL MONTHLY."

The question naturally suggests itself to the reader—*how recently?* and why does not the reply appear in the same journal? The same questions evidently occurred to Dr. Richardson himself, and he appends a note explanatory of the above paragraph, which I copy:

"These remarks were written shortly after Dr. Chamberlain's report had appeared in the N. Y. MEDICAL MONTHLY for January, 1854" (*mistake*—it was March, 1854), "but from accidental circumstances were not published at the time," &c.

What were these *"accidental circumstances"*? It will be a matter of interest and of surprise to the curious to be informed that Dr. Richardson's paper was presented to the editors of the AMERICAN MEDICAL MONTHLY, and was refused, on the grounds of unworthiness as a reply, and of its personal character. Whether the same "accidental circumstances" prevented the publication of Dr. Richardson's article at the time in the other medical journals of New York does not appear, but this is certainly no unfair inference. However this may be, the matter was suffered to rest from 1854 to 1856; and then, after nearly three years of burial, we see it *dug up* again, and the author, apparently trusting for his safety to the bad memories of his readers, on a fresh perusal of his notes, becomes suddenly overwhelmed with a sense of their value, and forthwith "has thought it advisable to prepare them afresh for the press." Surely no one can be deceived by so shallow an explanation and avowal, as to the man's real motive in this fresh preparation of his "notes"—though how far this may have been stimulated by outside influences, of course we neither know nor care to inquire.

Dr. Richardson proceeds:—"I was a member of the medical staff of the Penitentiary Hospital when nearly all these cases occurred," &c. The Doctor is mistaken. Dr. Richardson came to Blackwell's Island in May, 1853, and on reference to the dates of the cases given in Dr. Chamberlain's report, we find that *five* of the *ten* occurred prior to May, 1853, and before Dr. Richardson was ever seen on the Island. Consequently, of these *five* cases, at least, he could know nothing.

Here is a man attempting to criticize the treatment of certain medical cases *which he never saw:* which were treated, concluded, and recorded, before he ever set foot in the wards, and of which it may be questioned if he ever read even the notes, until he saw them in print from Dr. Chamberlain's report. Surely we cannot wonder that under such circumstances a man should wait *three years* before he could bring himself, without scruple, to such a "fresh preparation" of imaginary "notes."

The next paragraph of Dr. Richardson exhibits even more than a heedless pen or a treacherous memory. It misrepresents the whole system of Hospital therapeutics, and is an indirect slur upon the professional reputation of the late Resident, Dr. Kelly. In this, however, he feels safe. The dead cannot rise from his watery grave to rebuke the deed, or defend his memory from the wanton attacks of an ungrateful pupil.

We will not stay to speculate upon the motive which could lead to so gratuitous a departure from justice and good taste. Those familiar with the parties, and with all the circumstances, cannot be at a loss for an explanation, while to others the fact will be sufficient, and we hasten to give the offensive paragraph which suggested the digression.

"During the years 1852 and '53," says Dr. Richardson, "scarcely a single case of Delirium Tremens occurred in the wards of the Penitentiary Hospital under the supervision of Dr. Kelly, in the treatment of which the inhalation of chloroform was not resorted to."

To disprove this wholesale statement, I refer—

1. To the Hospital Books.

2. To the testimony of various members of the Hospital staff during the years referred to,—whose letters I have at hand, written in answer to my express inquiries upon this point.

Dr. Starling Loving, of Columbus, Ohio, a member of Dr. Kelly's staff in the years 1852 and '53, writes, "As regards the use of chloroform in the treatment of Delirium Tremens during the residency of Dr. Kelly, Dr. Richardson errs greatly. It was never used until opium and stimulants common in such cases had been fairly tried, and failed. It was in cases when the patient seemed likely to die after all ordinary medication had failed, that chloroform was resorted to—boldly, but carefully, by Dr. Kelly," &c.

Dr. William G. Smull, of Baltimore, Maryland, a member of Dr. Kelly's staff in 1853, says, "I write to give a flat contradiction to an assertion in Richardson's article, that 'scarcely a case of Delirium Tremens occurred in the Hospital in which inhalation of chloroform was not resorted to,' &c. This is a bold falsehood, for we all know, who were in the Hospital under Dr. Kelly, that chloroform was always administered with reluctance, and never until we were satisfied that all other means had failed. I would judge the proportion of cases of Delirium Tremens in which it was used, to be about one in five. The assertion that *all* the cases were thus treated, or that it was a general practice to administer chloroform, is false, as every one will testify who assisted in treating the cases."

"Dr. Richardson came to the Island about May 1, 1853."

Dr. F. N. Otis, surgeon to the steamer *Illinois*, a member of Dr. Kelly's staff in 1852 and 1853, says emphatically: "Dr. Richardson's statement in regard to Dr. Kelly's use of chloroform in Delirium Tremens is wholly at variance with the facts. The proportion of cases in which he recommended the anæsthetic was less than *one in four*, and never until narcotics and stimulants had been repeatedly and urgently tried, without avail."

Dr. J. R. McGregor, a member of the staff in 1853, at present Assistant Physician in the Butler Hospital, Providence, R. I., adds his testimony, to the same effect.

My own recollection fully corroborates the above statements. Dr. Kelly invariably insisted that chloroform was the last resort; all other means being first tested, faithfully and fully.

3. From the express and repeated statements of Dr. Chamberlain, whose paper is the subject of Dr. Richardson's attack. I give an extract or two from Dr. Chamberlain's paper, which proves this, and at the same time sets forth the purpose and animus of his report.

"We are disposed to offer some cases, observed and imperfectly recorded, without any view to such a report. They are extracted from our case book, not as a challenge to criticism, nor as a buttress to any theory, but in the hope that they may illustrate the use and power of the great narcotic, opium, and the greater sedative, chloroform. In some of them these agents were employed almost without stint or limit, and the effect in *suspended and restored animation* particularly, we have not seen elsewhere so fully detailed. They occurred in the Penitentiary Hospital on Blackwell's Island, under the care of Dr. William Kelly, late Resident Physician, &c.

"During the year 1853, 960 persons, in the various stages of debauch, were sent to the Hospital by the police courts of the city. Almost uniformly such belonged to the lowest class in society—prostitutes, thieves, 'fighting men,' and broken down vagabonds, who revolve in fixed orbit through their dens of vice and the charitable institutions of the city. Excess, privation, exposure, and chronic disease, are the staple facts of their lives. They arrive at the Hospital generally on the second, often on the third day after they have been arrested or picked up by the police. Meantime they have been confined in the station-houses and in the "Tombs," in cells often dark, cold, wet, and comfortless; cut off from all stimulus; unable to take, and sometimes to find food; oppressed with their degradation; a prey to "horrors," and the scarcely less horrid vision of months of imprisonment. It is not strange, then, that a large number of aggravated cases of Delirium Tremens occurs among them. Of the 960 mentioned above, but 200 are counted on the books of the Hospital as cases of Delirium Tremens. It was intended to exclude from this list every equivocal case, and of the remaining 760, credited with debauch simply, it is believed many might with much propriety have been counted as subjects of the graver malady. It may not be amiss to introduce the elements of an average case of debauch in this

connection. They are somewhat as follows:—A. B. presents herself at 5 P. M. She is pale, weak, and tremulous; has been drinking constantly and largely for a week. Since her arrest 36 hours have elapsed. She has had no sleep, and has been unable to take food. Her pulse indicates irritation and asthenia. The skin is cool, the tongue moist and pale. Last night she suffered frightful hallucinations. She craves liquors, dreads the coming night, and fears she shall die. From the warm bath, she is removed to a warm bed. Three pints of warm infusion of hops are given her. This acts gently but effectually in three ways: 1st, as an emetic; 2d, as a diaphoretic; 3d, as a hypnotic. When the stomach is quiet, after vomiting, two or three compound cathartic pills are given her. An hour or two after she is offered some bread and tea, or beef tea, and still later is required to drink a full draught of ale, containing a drachm of laudanum. Early in the night she sinks into a comfortable sleep, which continues late in the morning. She has a pint of ale with her food during the day. Sleeps well again, and is discharged on the morrow, to recover her perfect strength and health gradually. The case thus managed is a slight affair; neglected, it would probably have been Delirium Tremens. Those hereafter cited are Delirium Tremens of extreme severity, except the second, and must not be considered in any sense *average. The appeal to chloroform was held to be dangerous, and never accepted save as the 'ultima ratio medendi.'*"

Again, in Dr. Chamberlain's final paragraph:—"We shall resort to chloroform only when other medication fails," &c.

On this point we think the above testimony will be found conclusive as to the frequency of the resort to chloroform in the treatment of Delirium Tremens in the Hospital. In the light of such evidence, Dr. Richardson and his statements stand out in most unenviable relief. Nothing can be said in extenuation of his course, nor would we set down aught in malice; but we must be allowed to mourn over so deliberate, and at the same time so fatuous a departure from the truth, and wonder at the temptation which could have induced it.

Dr. Richardson proceeds at a random pace as follows:—

"From several hundred cases thus occurring (i. e., where chloroform was used), Dr. Chamberlain selects only *nine*," &c.

It is my full belief that if any records could at this distance of time be produced, of the exact number of Delirium Tremens cases in which chloroform was employed, during the whole of Dr. Kelly's administration, the whole number would be found, instead of several hundred, to be less even than one hundred. In this belief also others of the staff agree.

But "Dr. Chamberlain selects only *nine*," says Dr. Richardson. This is true. Dr. Chamberlain expressly states, in his paper, that he selected these as type cases, and cases presenting peculiar phenomena. He was proposing to prepare a brief paper for a journal, and not a tabular view of cases. These were mostly cases of extreme severity, in which, opium and stimulants having been carried to their extreme without effect, the prognosis was plainly *death*, unless relief could be obtained with some other agent.

"In all these cases," proceeds Dr. Richardson, "I shall endeavor to show that the recovery of the patients was due to the large doses of *opium and diffusible stimulants, administered internally, and not in a single instance to chloroform.*"

This is the purpose, the platform of his paper. Now, where does he "*show*" this? Where do we find any thing that looks like an "*endeavor*" to show it: surely not in the pages that follow. His purpose is distinctly, even *bravely* stated; but this being done, he dismisses at once both the "*showing*" and the "*endeavor*". He rambles on,—he quotes, he affirms, he even deplores,—but *proves nothing*.

His next paragraph contains an item which we are willing to omit, but since it was written in a spirit of warning to those of Dr. Richardson's "brethren in the profession" who have never enjoyed his own great advantages, or profited by like facilities, we give it as follows, and admire the candor which suggests it:—

"In two cases under my own charge it produced fatal results almost immediately," &c.

This fact, I am free to say, is correctly stated. No one of his colleagues has similar admissions to make, and I may add that the serious mortality from this cause, which attended Dr. Richardson's practice, was a matter of observation and comment, at the time, in the Hospital.

We come now to the cases.

Case I. Dr. Richardson consents to pass without remark. We do the same.

Case II. Here it is not amiss to remark upon Dr. Richardson's method of criticizing without reprinting an article which appeared three years before, and that in another journal. To this injustice he adds that of misrepresentation, as will be plain to every reader. Let us first read the case in full as reported by Dr. Chamberlain.

"August 10, '53. Irish butcher, 28 years; ordinary height and weight; good condition; habitual drunkard; has been drinking

brandy freely; symptoms, the ordinary ones of delirium tremens; perfectly wild; unmanageable.

Treatment.—After freeing stomach and bowels, ordered tr. op. f℥i. q. h. (id est quaque horâ) for five hours, unless he should sleep; small quantity of stimulus. August 11 A. M.—No sleep or improvement; continued medicine. 10 P. M.—No improvement; chloroform administered with ease and happy effect. August 12.—Slept nine hours. August 20.—Discharged well."

With the case before us, let us compare Dr. Richardson's version.

Case II. "In this case the patient took ℥v of laudanum and 'a small quantity of stimulus'—how much, is not stated—in five hours. On the following day 'the same treatment' was continued until 1 o'clock P. M., when chloroform was administered 'with happy effects.'"

Here we find the case curtailed nine hours, and the amount of opium proportionably diminished by Dr. Richardson's substitution of "1 P. M." for 10 P. M. Is not this deliberate? The first night (patients being admitted to the Hospital usually about 4 P. M.) patient took ℥v tr. op. No sleep; wild and unmanageable—of course required restraint; next day no better; continued tr. op. ℥i. quaque horâ, from the time of morning visit until 10 P. M.; no improvement; patient has taken more than ℥xvi. of laudanum in thirty hours, without the least effect. Had not the insufficiency of this agent been shown? Thirty hours of the straight-jacket and two ounces of laudanum, would, in the mind of most practitioners, stamp the case as almost desperate. The man must sleep or die. 10 P. M. chloroform administered; patient sleeps nine hours without interruption and convalescence is established. And yet says Dr. Richardson, in remarking upon his version of the case, for the instruction of his medical brethren who lack the advantages of his superior experience, "*this was evidently a mild case* (how '*evidently?*'), *and would undoubtedly have yielded to the other remedies had chloroform been omitted.*" Who knows this, and what can give Dr. W. R. Richardson the authority to say it? Who else that reads the facts, as already given, will endorse such headlong dogmatism or accept so lame an oracle?

Case III. I give an abstract of the case from Dr. Chamberlain's report, with the caption. "The third case was more aggravated than either of the preceding. True delirium tremens partially subdued during the first night of observation; progressing in intensity during the following thirty-six hours under the ordinary treatment; becoming critical on the third night; resisting the repeated use of chloroform; persistent under the full effect of opium, on the 4th

day and evening; and finally subdued by the anæsthetic, on the 4th night.

"December 23d, 1852. An English book-keeper; thirty-two years of age; full habit; scrofulous diathesis; for the past three months in a constant debauch; little or no excitement; condition asthenic prostate, with excessive muscular tremor, not unlike cholera. *Treatment.*—Emesis, Catharsis; Tr. op. gtt. 100; Punch. December 24th, 9 A. M.—Slept two hours; more quiet but wandering; ordered tr. op. gtt. 120, with punch and ale. 7 P. M.—Same; repeat morning's prescriptions. December 25th, 9 A. M.—No sleep; worse; continued stimulus, and tr. op. gtt. 40 q. h. for five hours. 10 P. M.—Worse; skin blanched; bathed in perspiration; chloroform inhaled; anæsthesia continued only fifteen minutes; repeated at intervals four times in two hours without permanent effect; condition not improved; ordered strong milk punch—tr. op. gtt. 50. December 26th.—No sleep; ordered tr. op. gtt. xx. hourly and stimulus. 10 P. M.—Sleepless and furious; pupils a point; chloroform to approach of stertor; spasm and laryngismus during its exhibition; effect transient; repeated; effect permanent. December 27th.—Slept seven hours; is calm and rational."

Dr. Richardson's entire report and remarks upon this most interesting case occupying not quite *four lines!* I give his words: "In this case, 900 drops of laudanum were given, and a large quantity of punch—the amount not stated. Chloroform was administered *seven times*, the sixth time producing almost fatal '*spasms* and laryngismus.'" Of these two paragraphs of criticism, the first throws no light upon the case beyond what is furnished by Dr. Chamberlain's report, and the second contains a misrepresentation.

This case is well remembered. By a typographical error, it bears date in Dr. Chamberlain's report 1853, instead of 1852, which was, at least, five months before Dr. Richardson came to Blackwell's Island—consequently he never saw the case at all. The continued administration of chloroform at intervals during the night of the 25th of December, is explained in few words. It was exhibited as in surgical practice, merely to that stage which induces in the patient a condition of quiet semi-consciousness, with freedom from pain and relaxation of the voluntary muscles. The inhalation was not in this case carried to stertor, and the immediate effects of the anæsthetic having passed off, the patient awoke to a condition similar to that before its exhibition. This was the moderate administration of chloroform. As it was found not successful at the time it was laid aside,

and opium with the stimulants resumed for twenty-four hours longer, when the extreme contraction of pupils showed the system under its full influence. Still no sleep. Patient so violent as to require constant restraint with straight-jacket. (This is well remembered, although Dr. Chamberlain does not mention it in his report.) At 10 P. M. of the 26th, chloroform again administered, and its effects carried, much farther than before, "to the approach of stertor." Now who does not know, that has any familiarity with the use of chloroform, that convulsive movements and embarrassment of the laryngeal muscles, not unfrequently precede and attend the approach of stertor? But the first inhalation, even to this degree, proved insufficient. It is reported: the patient sleeps and in two days is well.

Thus we see the anæsthetic employed only as the *ultima ratio*, and such in the case, so far as human judgment can determine, it was proved. Dr. Richardson's "almost fatal spasms," &c., is a pure and somewhat malignant invention.

CASE IV., occurred January 23, 1853, four months before Dr. Richardson came to the Island. Consequently, notwithstanding the wide "experience" which he claims in connection with *similar* cases, his knowledge of this particular case is nothing, and his opinion of it is, of course, valueless. I give a brief abstract of the case from Dr. Chamberlain's report:

Patient, a Scotchman of robust frame, 38 years of age. Health generally good. Has been on a long spree; much excited, talkative, but coherent; tongue and limbs tremulous; surface warm, dryish; pulse 80, full; no sleep for three nights past. *Treatment.*—Emesis by hop tea, followed by tr. op. gtt. 75, repeat in two hours. Midnight: no sleep, no change. January 24, 9 A. M.—Slept little, condition same; ordered pil. c.c., No. iij. 3 P. M.—Enema; bowels freely moved; punch Oj. 7 P. M.—Condition more promising. January 25, 5 A. M.—Delirious, noisy, violent; restraint necessary. 9 A. M.—℞. Chloroform ʒj.; M. gum acaciæ, q. s. ʒviij. m.; S. ʒi. q. h. 4 P. M.—Has taken of ℞. ʒvj.; quiet, eats well. 7 P. M.—Worse; very violent; chloroform twice inhaled to approach of stertor: no sleep. 8 P. M.—Ordered punch freely; tr. op. gtt. 60. 12 P. M.—Do. 3 A. M.—Do. January 26, 9 A. M.—No sleep; no improvement. Pupil contracted; pulse small, rapid; great excitement. Punch continued. 4 P. M.—Pulse more feeble, more rapid; surface clammy; face cadaveric; condition unpromising. Excessive muscular activity; chloroform as last resort, by inhalation; great spasm and laryngismus; effect brief; repeated to ster-

tor. Respiration suddenly ceased ; artificial respiration performed for several minutes, by alternate pressure and elevation of thorax. Function restored, and with it sleep and rest, which continued at intervals for 48 hours. Patient well.

In Dr. Richardson's remarks on this case, he says nothing of one of its specially interesting features, viz : the internal administration of chloroform. The concluding paragraph of Dr. Richardson we accept and endorse : "Fortunately, the patient *was* saved 'to illustrate the power of that greater sedative, chloroform.'"

Case V. The main features of this case, his long treatment, &c., resemble those of Case IV. up to a certain stage, as will be seen in the abstract which follows. It happened that after successful treatment for Delirium Tremens, the patient was transferred to my own wards, and remained in my charge from that time until his death. I will add that this case also occurred five months before Dr. Richardson's connection with the Hospital.

Patient an Irish laborer, aged 60 ; large frame, but constitution broken by yellow fever, syphilis, and various excesses. After appropriate general treatment, and the failure to induce sleep by stimulants and opium (laudanum gtt. 220), chloroform inhaled, which produced anæsthesia but only temporary sleep. Next night, after taking tr. op. gtt. 150, chloroform again inhaled, accompanied by spasms and laryngismus, as in preceding case. These soon passed, and sleep succeeded, but again only temporarily. In two hours, inhalation for the *third and last time.* At point of stertor, as in Case IV., respiration suspended, but again restored by artificial means, and patient fell into a quiet sleep to awake "well and rational."

Dr. Richardson's version of the case is brief and characteristic. He sums up incorrectly the amount of opium and stimulants taken, and then says : "Chloroform was administered *four* times," &c. (this is a mistake, perhaps through inadvertency, though he must have had Dr. Chamberlain's notes before him) ; a few lines further, "he was restored to life by means of cold *effusions*" (*affusions* would better suit the connection, and be more just to Dr. Chamberlain), "only *to die* in a few days with pneumonia, caused undoubtedly by the congestion of the lungs which this injudicious and repeated use of chloroform had produced"

Dr. Richardson here would evidently invoke, in his readers, tears of sympathy for the patient, and indignation at Dr. Chamberlain's inhumanity. But let us look at the facts.

I have already said, that after this patient was discharged from the Delirium Tremens ward, on the 16th December, 1852, he was transferred to another ward, under my own charge. The case I recorded at the time as one of interest, and I now copy from my Private Case Book:

"December 17. Patient admitted from Delirium Tremens ward. Complains of pain in chest and cough; physical examination shows dulness on percussion over whole dorsum of left chest; auscultation reveals relaxed condition of bronchial membrane, with tubular respiration over left, and slight mucous râle over right chest; no rational signs of pneumonia; *diagnosis obscure;* breath offensive after coughing; countenance cachectic; condition feeble. Treatment: generous support, with full diet and tonics. January 9: Physicals signs very obscure; treatment continued. January 25: Not improving; expectoration profuse, and excessively fœtid cough constant; tonic doses of quinine and iron, with full diet, and egg nogg. February 15: Diagnosis, cancer of left lung (?). March 2: Since last note patient has failed gradually; exhausted with cough, and the profuse and purulent curdy sputa. This P. M., in fit of coughing, died. *Autopsy.*—March 3: 12 hours. Post mortem: Body much emaciated. *Right lung*—Slight pleural adhesions of long standing; lower lobe congested; upper and middle lobes crepitant; no tubercles. *Left lung*—Entire surface adherent to costal parieties; whole lung solidified, with softening of middle lobe in posterior portion, forming a cavity capable of holding f ʒvj., in which was found f ʒi. of curdy pus, unlike tubercle, and evidently of cancerous origin; whole lung infiltrated with cancerous deposit. Other organs not examined."

And this is the case which Dr. Richardson never saw; which occurred, resulted, and was recorded, like others of which he professed to have a knowledge, months before he entered the Hospital. Yet he does not scruple to write its history. He misquotes and garbles the notes of another, which were taken at the patient's bedside, and even concludes the case with a flourish of guess-work pathology. Let the reader estimate for himself the value of such "advantages," and their fruit in such "experience."

CASE VI. I give the caption of the case from Dr. Chamberlain's report: "In the following case, after an hour and three-quarters of futile anæsthesia to the point of stertor, having in view the issue of the preceding cases, we determined to proceed to the *verge* of asphyxia. This *occurred* suddenly, and by it the disease was as suddenly vanquished. Artificial respiration completely restored life and

all its organic functions. The patient slept, and after eight hours rose again to the level of consciousness and reason, perfectly well." This case, the principal features of which are given in Dr. Chamberlain's caption, differs from the two preceding ones chiefly in the extent to which the anæsthetic was carried on its first exhibition. Asphyxia was induced unexpectedly, but without danger; indeed, the return of respiration was the dawn of convalescence.

Dr. Richardson makes nothing of the case; but I am happy to add, that his summing up of the amount of laudanum taken in this case, contains only a single error of thirty drops.

Case VII. An abridgment of Dr. Chamberlain's report of this case seems necessary for the better appreciation of Dr. Richardson's criticism Quotation marks enclose verbatim passages from the Report.

Patient admitted June 28, 1853; has been "drinking very freely for four weeks," "much excited, tremor of limbs excessive." Emesis, catharsis, and laudanum, up to 9 P. M. of 29th, were insufficient; at that time is reported in "furious delirium," "perfectly uncontrollable." Restraint necessary. Brandy freely given and "chloroform administered," "anæsthesia secured." Patient remained quiet, and dosing all night and all the next day, and was (July 6th) discharged cured. Reädmitted Oct. 26 (three months after), condition as before. Ordered emesis with hop tea, but failed to secure it." Tr. op. gtt. 120, 7 P. M.; do. 9 P. M.; do. 11 P. M.; do. s. v. g. ℥iv. Oct. 27, "slept very little, is quiet, busy, and wakeful;" "determined to secure sleep by opium and stimulants, if possible." "Took gtt. 120 tr. op. at 9 and 11 A. M. and at 6, 7, and 9 P. M.," which +360 of previous night =960 gtt. Two ounces of laudanum in 26 hours, with "ale and punch freely through the day and evening." Surely this was decided treatment. Yet we read that at 11 P. M., though his pupils were contracted to a mere point (as my own private Case book has it), he was perfectly incontrollable." Sleep at almost any price was the imperative indication. Accordingly, "chloroform by inhalation." First effect, "violent spasm, with opisthotonos"—a very common phenomenon, as all know—but as the inhalation was continued, "spasm less, laryngismus so great that it was pro tem. suspended." Up to this point nothing appeared which is unfamiliar to those accustomed to the use of chloroform; but *at* this point, when the sponge was removed, contrary to common observation, the laryngismus continued to increase, breathing became more and more difficult, until it ceased, i. e., asphyxia supervened. Now no physician

is very much alarmed at a *momentary* asphyxia in a case of drowning or in a newly-born infant; nor do we find Dr. Chamberlain alarmed. He continues: "Artificial respiration unsuccessfully attempted for two minutes," then "insufflation with the pressure upon the thorax maintained for some minutes, until the natural breathing was resumed, and continued at seven respirations per minute; stertorous; slept twenty minutes." This was one administration of chloroform, occupying in all perhaps half an hour, and it was only partially successful. Accordingly, when he woke, brandy ℥iv. was given, and chloroform again administered. "Little or no spasm followed." Anæsthesia in its normal form was secured, and sleep, though for two or three hours fitful and disturbed, became towards morning more profound. At 5 A. M., seven hours after the first inhalation, and perhaps five after the second, Dr. Chamberlain, after "watching him narrowly" all night, "left him, overcome with sleep. Quod erat desiderandum—a result secured by opium, and unquestionably accelerated by chloroform. Nov. 5.—Discharged well."

In travelling over this case—for he does not review it—Dr. Richardson becomes hysterical. He seeks emphasis in hard words, in italics, and in small capitals. Determined to make an impression, at all hazards, he divides the first administration of chloroform, making two of one. He cries "*in vain*" because artificial respiration required some minutes for its successful establishment; he groans over the exhibition of Dr. Chamberlain's coolness and patient watching, as a "dreadful scene," and then, losing, in his own fright, the power of copying correctly the report which lies before his very eyes, says: "fifteen or twenty hours afterward" (in place of four or five), "stimulants and opium having been freely and frequently given" (when not a drop of either is recorded or was exhibited after the second inhalation), before the patient was left as above noted, "overcome with sleep." Is any language too strong to characterize such criticism?

CASE VIII. is one of remarkable interest and value, and one in which life seemed clearly saved by chloroform. The case was my own, and the anæsthetic was administered by the Resident Physician (Dr. Kelly) in person. Opium and stimulants had been carried to an extent which seemed almost impossible, but without producing sleep or allaying the tremendous nervous excitement. The man must sleep or die. Chloroform seemed to offer his only chance. This chance was taken, and the "ultima ratio" was again proved successful.

I give an extract from Dr. Chamberlain's report of the case, which is as able as it is exact:—

May 1, 9 A. M.—[Patient in the fifth day of his treatment, was laboring under acute bronchitis, though not severe; had slept little or none; stimulants had been very freely given; tr. opii, in all, gtt. 1560 since admission, and chloroform twice inhaled, at intervals of 24 hours; all without effect.] "Evidently sinking; pulse very feeble; delirious and difficult to control; stimulants. 12 M.—Tr. opii gtt. 120; pupil normal; egg nog ad libitum; pulse scarcely felt at the wrist. 4 P. M.—No improvement. 6 P. M.—Face livid; pulse at the wrist almost 0; heart's action extremely feeble—70. Says he must die; calls for liquor. Ordered s. v. g. ℥iv. 8 P. M.—Pupil contracted; has taken no opium since noon; chloroform inhaled; heart feeble, *its action becomes less—less—wavers;* chloroform continued; respiration 4–8 per minute; spasm of limbs; heart's action stronger; pulse returns, fuller; respiration more steady; patient sleeps only five minutes; chloroform again administered for ten minutes, at the end of which comes quiet and profound sleep; limbs perfectly relaxed; slept continuously for nearly three days, and was discharged well." Bronchitis had disappeared.

On this case, Dr. Richardson finds little to say, except to contradict the result. Each inhalation of the anæsthetic, he writes, "produced spasm, but *no sleep*." The case he never saw.

Case IX. In comparing Dr. Richardson's version of this case with the report of Dr. Chamberlain, it seems as though the force of misrepresentation and error can no further go. Let us point out the items, without giving a lengthy abstract.

A summing up of the amount of laudanum taken by patient in the progress of her case, which lasted three days, shows gtt. 1260; brandy and punch ad libitum, or "as much as she can be made to take." Dr. Richardson commences his review with, "in this case comparatively little brandy and opium were given," &c. Again he says, "during the progress of anæsthesia subsultus came on," &c. I refer the reader to patient's condition on admission. After eight days of continued debauch, and no sleep or food for three days, we find her tremulous, excited, and in a low, muttering delirium. Next day, "epileptiform convulsions," &c.; every symptom of extreme debility and prostration; and, need I ask, could the supervention of subsultus on the exhibition of the anæsthetic be an occasion of surprise? Then followed the suspension of respiration, and its restoration by artificial means. "Cold effusions," says Dr. Richardson (*affusions*, if you please, Dr.), "fail," and insufflation succeeds in restoring her to vitality—"*fanned the feeble flame of life into a*

momentary flicker," he tells us (genuine effusion, this), and then "she was watched, in the hope that at the gate of death the vicious *cycle** of her dreams might have been broken," &c., &c. The inference which Dr. Richardson would have us draw from his account, is, that she died then and there, under the influeece, and as a consequence of the anæsthetic. In answer, I have only to refer to Dr. Chamberlain's report, which tells us that the patient rallied; lived 31 hours; delirium constant, but milder in form ("seems busy with her household affairs"); had strength to walk several steps in the ward; and died on the morning of the second day after the last inhalation.

Dr. Richardson then grows more sturdy, and denies that there was any post mortem. This, too, in the very face of Dr. Chamberlain's report of it, headed *Autopsy*, and appended to the case as published. Let us hear him: "No post mortem was made. Had any been made, I am certain the lungs would have been found filled to engorgement with venous blood." This fanciful, ex post facto diagnosis of Dr. Richardson is at once spoiled by reading the last paragraph of Dr. Chamberlain's report of the case. "Autopsy shows nothing of importance; a normal brain; a little serum under the arachnoid and in the ventricles," &c., &c.

So, it appears that there *was* an autopsy in the case, duly made, and made in detail, even to the brain. Lungs and other organs were found in a normal state, and death from weakness and exhaustion established beyond a question.

Dr. Richardson's denial of this autopsy is as strange as it is unfortunate. To suppose that it was wilful is to give him credit for the last degree of hardihood and folly. To consider it a mere slip of a heedless pen, is only to recognize another manifestation of that general disregard of accuracy which has characterized his whole production. Of these two conclusions, the alternative is before us—we are disposed to accept the latter.

CASE X. is one of those in which chloroform, *internally*, was used successfully. Here, also, it was resorted to only after opium and stimulants had proved of no avail. I would gladly do Dr. Chamberlain the justice to reprint his report, but my limits forbid. The chloroform was given in mucilage, in doses of gtt. 7 to 8, and with most happy effect. The case lasted four days.

In his review, Dr. Richardson suppresses the fact of the internal

* Dr. Richardson's confusion of words betrays him a third time into rhetorical nonsense. Dr. Chamberlain used in this connection the word "*circle.*"

administration of chloroform, and despatches the case with three lines of loose remark.

After passing over the consideration of the cases, and washing his hands of all participation and sympathy with such "treatment," Dr. Richardson, having no longer any guide or check, rambles on and gives us the benefit of his own experience, with some choice pathological views.

He first, however, deigns to allude, in a general way, to the internal use of chloroform as a sedative and anæsthetic, and wonders that any man can claim credit for a remedy which he does not test by its *sole* employment in the treatment of a disease. The inference is that Dr. Chamberlain is uncandid in claiming any merit for chloroform in the treatment of Delirium Tremens, because it has not been used alone to the exclusion of all other agents. He also claims that in Dr. Chamberlain's cases, the anæsthetic only seemed to produce sleep, *after laudanum and other stimulants had been largely and ineffectually administered.*

All this is trifling with the subject, and with the animus of Dr. Chamberlain's report. Dr. Chamberlain expressly and repeatedly says, that he has regarded chloroform and employed it as an *adjuvant* to other remedies. He has appealed to it as an "ultima ratio," and such he has proved it in certain cases. He records his obsevations, and gives them to the profession, as his report says, "for what they are worth." He attacks no man's theory; he criticizes no man's practice. He claims nothing but candid dealing on the subject, and least of all, does he claim to be an apostle of chloroform.

"On reviewing the cases," proceeds Dr. Richardson, "in which chloroform has even the appearance of aiding in the cure, and they form a very small proportion of those contained in Dr. Chamberlain's report," &c.

Let us look back for one moment; and let the cases answer for themselves:—

Case II. No sleep for thirty hours. After one inhalation immediate sleep, continuing nine hours.

Case III. No sleep for seventy-two hours. Deep anæsthesia followed by immediate sleep, which lasted seven hours.

Case IV. No sleep for seventy-two hours. Deep anæsthesia; sleep immediate; lasting four hours.

Case V. No continuous time of sleep for forty-eight hours. Deep anæsthesia; sleep again immediate, and continuing all night.

Case VI. Patient almost moribund from exhaustion. No sleep,

notwithstanding the full influence of opium and stimulants, for thirty-six hours. Anæsthesia followed by sleep at once, continuing all night without interruption.

CASE VII. No sleep for thirty hours. Deep anæsthesia; sleep fitful for five hours; afterwards without further medication *continuous.*

CASE VII. Hardly any sleep for ninety-six hours. Anæsthesia and continuous sleep.

CASE IX. Death from exhaustion. Chloroform of little or no avail.

CASE X. Inconclusive.

What Dr. Richardson says in the next paragraph, of "*fatal asphyxia,*" must refer to his own "experience," since we have already seen that the only two cases from this cause ever observed in the Hospital, occurred among his own patients.

But whatever else such "experience" as Dr. Richardson's would justify, it would hardly be equal to the implied discharge from the wards of patients in a state of "partial resuscitation from asphyxia.'

With Dr. Richardson's *pathology* I do not propose to meddle. It is dogmatic and rambling, and it is not my purpose here to endorse or dispute it.

I am free to say, however, that I have not been accustomed, in cases of Delirium Tremens, to attach *much* importance to "the *formation and deposition of tubercles as an intercurrent disease,*" especially when the average duration and progress of such cases is less than a week.

I have never seen, nor, on inquiry, have I been able to hear of a case of death after chloroform, "from pulmonary apoplexy." I say to Dr. Richardson, or any one, show us the recorded case.

Dr. Richardson's next paragraph helps his "medical brethren who have never enjoyed his facilities," &c., to the conclusion that his own experience of death from chloroform has indeed been wofully great. "I have made," he says, "autopsies in several cases of death following the administration of chloroform," &c. The whole world furnishes but comparatively few cases of death from this cause: of these Dr. Richardson may claim his share; but who has been guilty of the slaughter necessary to furnish such extra post mortem advantages?

Finally, we are content to leave Dr. Richardson in the full enjoyment and practice of the meek philanthropy hinted at in his peroration. May we not, however, hope that his "good will toward men," thus manifested, may prove of a sort not to scatter abroad, like his rhetoric, or *slip up* entirely in its progress, like his ready but too facile pen.

New Methods of Operating for the Cure of Vaginal Fistulæ. By J. Bart. Minturn, M.D., *of New York.*

Vaginal fistulæ are solutions of continuity existing in the walls between the vagina and bladder, urethra or rectum, or between the bladder and uterus, where they lie in contact, forming abnormal openings, through which the urine or fæces and flatus escape into the vagina. The cure of these fistulæ is accomplished by causing a coalescence of their sides. When small and urethral, or rectal, this may be sometimes effected by touching the walls of the aperture with the nitrate of silver, or hot iron, occasionally repeated. When the fistula is larger, its cure can only be accomplished by resorting to operative means, of which the processes are numerous, and the contrivances are many and ingenious,—a fact which proves the difficulties of the operations, and the unsatisfactory results most often obtained.

I do not now intend to write a treatise upon this most interesting subject—doubly interesting, because the unfortunate sufferers are women, and the causes, in the vast majority of cases, that maternal act by which man is born into the world ; but will confine myself to the exposition of some new methods of operating, for which I claim the originality, either of the process itself, or its application to the treatment of these cases, or both the process and its application, only referring to other methods when they have been adopted, or for the purposes of elucidation or comparison.

In cases of *vesico-vaginal fistulæ*, the operation is commenced by making an incision of the mucous membrane of the vagina circularly around the fistula, at the distance of three, four, or more, lines from its borders, according to the condition and relation of the parts. If the fistula is of small size and recent date, the portion of membrane circumscribed by the incision may be dissected entirely away, including the borders of the fistula, as recommended by M. Gérdy. The lips of the wound to be brought together and retained in contact by the means to be considered farther in advance, to avoid repetition. But in a second class of cases, where the abnormal opening is of larger dimension, the borders widely separated, or complicated, with loss of substance, great advantage will be derived from having recourse to a species of plastic operation, which consists in making an incision of the mucous membrane, just as described for the first class of cases. The portion of membrane circumscribed by the

incision is then to be dissected up *from* the circumference *towards* the centre, and left *attached* at the borders of the fistula for the space of a line or more, according to the vitality of the parts. This flap should include not only the mucous membrane, but some layers of subjacent tissue, containing vessels necessary for its life and activity. This flap is next seized with forceps, or the fingers, reversed upon itself, and pushed through the orifice of the fistula into the cavity of the bladder, thus bringing the dissected surfaces of the flap into contact in this new situation. This movement of reversing the flap and turning it through the orifice of the fistula, may often be facilitated by making a slight incision into the vaginal wall around the circumference of the base of the flap. By means of the dissection and disposition of the flap here described, a much greater extent of surface is obtained, fresh and proper for union by the first intention, than by the ordinary method of only pairing the borders of the fistula. At the same time that the flap acts most advantageously by filling up the opening of the fistula, thus preventing the liability to the infiltration of urine between the uniting edges, which is known to be one of the most common causes of failure in these operations, there is also secured a uniting base, upon which the vaginal dissected surfaces are brought and retained in contact, thus strengthening the union. In a third, and extreme class of cases, much additional advantage may be derived by conjoining with the *modus operandi* last described, another species of autoplasty, that of the *méthode Français*, or sliding, to facilitate the coaptation of the borders of the solution of continuity. It is as follows: lines of incision are made from the extreme commissures, or angles, of the dissection, as described above, parallel with each other, in a direction *from* each side of the fistulous opening, for a variable distance, according to the extent of the part to be repaired. Thus, if the fistula is longitudinal, the incisions are to be made from the angles aforesaid, *upon* each side of the vagina; if transverse, from the angles *towards* the vulva and uterus, the sections of vaginal wall contained between the parallel incisions, are next to be dissected up to the depth of two or three lines in the direction *away from* the fistula, and left attached, to be brought together and united over the middle line of the opening, by being *slid* upon the surfaces from whence they were dissected.

In cases where the fistula is transversal, of large size and situated near the neck of the uterus, another advantage will be derived by employing this process upon the vaginal wall anterior to the fistula,

in connection with the plan proposed and successfully practised by M. Jobert (de Lamballe),* which consists in a semicircular incision, practised transversely upon the vagina at its insertion at the neck of the uterus, and by a careful dissection, made from before backwards through its attachment, not fearing to divide some of the superficial fibres of the neck, separate the bladder from its attachment to the uterus, and thus cause the upper front portion of the vagina to descend from its attachment at the neck, towards the vulva. This accomplished, considerable space is gained, and the opening of the fistula much diminished.

According to the case, according to the position and disposition of the fistula, and the variable necessities of the operation, it may be found expedient, or necessary to draw the neck of the uterus towards the vulva. This traction ought to be made gradually by the aid of strong double-hooked forceps, and in general the neck ought to be seized in a direction opposed to the great diameter of the fistula, that is to say, from right to left if the fistula is longitudinal, from before and behind if it is transverse. This proceeding has for its object, to render more free the action of the operator upon the borders of the fistula.

In all cases, the points of implantation of the hooks ought to be made in such a manner as to bring to view the anterior and lateral insertion of the vagina and neck of the uterus.

In cases of *urethro and recto-vaginal fistulæ*, requiring an operation for their cure, the same incisions and dissections as described for the different classes of vesico-vaginal fistulæ, are to be practised according to the extent and condition of the abnormal opening. In urethro-vaginal fistulæ the borders of the dissection or flaps, as the case may require, are to be brought together and united over a catheter previously introduced into the bladder, and worn until the cure is effected, that the continuity of the urinary canal may be established.

Vesico-Urethro-Vaginal Fistulæ.—In the rare cases where the uterus has been perforated at a point corresponding to the bladder, and this organ opened into, the urine escapes through the vesico-uterine fistula, which results. The operation is commenced by making a semicircular incision, transversely upon the anterior part of the uterine neck, at the line of junction between it and the vagina, and carrying the dissection carefully, from before backwards over the neck, keeping the edge of the bistoury turned towards it, or making use of the handle of a scalpel, that the bladder may not be wounded:

* Jobert Traité de Chirurgie plastique, t, ii., p. 442.

the track of the fistula is crossed, and the bladder displaced from its attachment to the uterine neck, and made to descend with the vagina, towards the vulva, *thus bringing the fistula in the vesicular wall into view in the vagina, where it may be operated upon and treated as a simple vesico-vaginal fistula,* the fundus of the organ coming at the same time in contact with, and forming adhesions over the fistulous orifice in the uterine neck. Although M. Jobert (de Lamballe) first proposed, and employs this dissection in cases of large transverse vesico-vaginal fistulæ situated near the neck of the uterus, to render the separation of the lips of the fistula less considerable, and to facilitate and strengthen their union by removing all tension from the parts as I fully described when treating of that class of fistulæ, and to quote the language of at least two surgeons and authors of celebrity, Vidal (de Cassis) and Sédillot, who, when they have described it, say, in almost the same words, "La nouvelle operation est une reale conquète chirurgicale ; elle rend une service immense aux malheureuses femmes affectées de fistule vesico-vaginale. M. Jobert a fait tout ce qui etait possible : il n'a pas pu faire l'impossible."

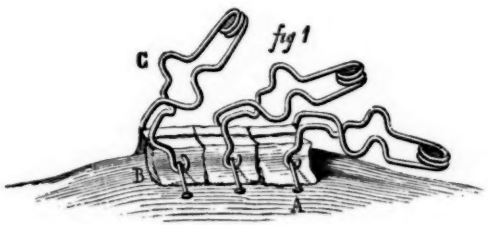
But he has never employed it in any other class of cases, or for any different purpose than that here described, it having never occurred to the learned professor to employ it for the cure of the class of cases now under consideration, for which it is so eminently applicable, and from which so great advantage may be derived, as converting a hitherto intractable, because inaccessible fistula, into one of a simple character, within the reach of surgical treatment.

During the performance of these operations, great benefit will be derived from injections into the vagina of cold water, iced water if convenient, to cleanse the parts from the blood and constrict the bleeding capillaries upon the dissected surfaces ; and care should be taken that all hæmorrhage has ceased, and the surfaces of the wound be cleansed before the edges are brought together for union.

The loss of blood in these cases, though never great, and usually small, is yet sufficient to materially obstruct the view and render these operations more difficult and tedious than they would be in almost any other situation. If means could be devised by which these operations could be performed without hæmorrhage, and the results be equally good or better than by the ordinary methods of dissection, then *another true surgical conquest* would be gained. To accomplish this much-to-be-desired object, I have proposed to several surgeons here, the use of the *actual cautery* in cases of small and moderately-sized fistulæ. The removal of the destroyed membrane

around, and the indurated portions at the orifice, when they become loosened, and the coaptation of the edges of the resulting wound, as if it had been made by the knife, and retain them in contact until union takes place, which I do not think would be prolonged much, if any, beyond the ordinary period required.

The next step of the operation consists in introducing pins (Fig. No. 1. A) across the lips of the wound, entering upon the vaginal mucous membrane two, three, or more lines from the edge of the dissection, and coming out at corresponding points upon the opposite side, free of the mucous membrane of the neighboring organs, bladder, and rectum. These pins before their introduction, have a little square piece of cork (B) placed upon them by the side of the head. After having introduced the requisite number of pins, at the distance from each other of about one-third of an inch (d'un centimètre l'une de l'antre), another little square piece of cork is passed upon each of the points, to oppose the one which occupies the side of the head.



This done, we proceed to the application of the serre-fines of Vidal (de Cassis), modified and made applicable to these operations, which M. Charriére Son, has had made after my design (C). These serre-fines are of large size, and the branches made to form almost a right angle with the body, and terminating at their extremity in a blunt hook, turned towards the body of the instrument.

The branches of the serre-fine are made to embrace the lips of the wound, previously approached by means of a forceps, and rest upon the pieces of cork, at the same time the hooks are made to embrace

the extremities of the pins, which serve to sustain them firmly in position. The heads of the pins are next pushed up near the hooks, and the projecting points opposite are cut off, to prevent them wounding the neighboring parts. By the pressure made by the hooks and branches of the serre-fines upon the little pieces of cork, we obtain a regular and nearly uniform pressure upon the whole surface of the wound, and consequently the conditions for reunion are incomparably superior to those which are offered by the simple thread suture.

Another advantage this method has over the ordinary suture will be evident as soon as mentioned. The amount of irritation and inflammation excited in the parts by the presence of the thread or tape sutures often destroy the conditions necessary for union by the first intention, and endangers the life of the patient. The amount of swelling which results causes the sutures to sink deeply into the tissues, destroying the parts underneath them by strangulation, or ulcerating their way out, before the adhesive conditions can be re-established. But it will be at once perceived, from the analogy of their action in other parts, that the pins do not act injuriously against the establishment of the conditions of union, whilst the serre-fines, accommodating themselves to the conditions of the contained lips, will expand in a hyperæmic condition of the parts, and contract again as that condition subsides, sustaining a continued and even lateral pressure upon a large extent of surface, which renders unnecessary the parallel lateral incisions usually practised for the purpose of relieving tension, when the simple sutures are employed, or the division of the sphincter ani muscle, as is recommended in operations for the cure of recto-vaginal fistulæ.

This new suture method possesses all the advantages of the twisted and quilled sutures in an eminent degree, without their inconveniences, and more, these last are nearly inapplicable in the vagina, for it would be extremely difficult to apply them in a depth often so great, and in a space so narrow, which has led to the abandonment of the process of M. Roux. But on the contrary, one of the advantages of this means of constriction, is the facility with which it can be applied and removed, either with the fingers, a dressing forceps, or a forceps, *ad hoc*. Moreover, by the use of the pieces of cork and serre-fines we obtain the great advantage of distributing more equally the lateral pressure, than can be obtained by either the twisted or quilled suture, and the further advantage, as before stated, of adjusting pressure, which no other kind of suture possesses.

Although Dr. Sims of New York, has reported great success following the employment of his "Clamp Suture," * and I would be the last to detract from his well-earned and deserved reputation, yet I must state the facts, and say that the same objections weigh against it as against the varieties before mentioned, though in different degrees in some respects; but the difficulties attending its application to the different forms and extents of fistulæ are very apparent, and must often be serious if not insurmountable.

When others besides the inventor have attempted to apply the "clamp suture," in the vast majority of instances as far as my knowledge extends, the results have been failures, either to apply it properly or to effect a cure. This proves the necessity for something more simple, and easily applied, which I think will be found in this new method of retaining the borders in contact.

In fact, it is not only applicable to vaginal fistulæ, but can be employed with advantage upon the majority of wounds requiring sutures, especially in those cases where there is much traction upon the parts, and union by the first intention anxiously desired.

It will certainly be a very great resource in ruptures of the perineum following accouchements, &c., &c.

In *recto-vesical fistulæ*, resulting from wounds, or following the operation of lithotomy, the same *modus operandi* can be employed, by dilating the anus and rectum, if necessary dividing the sphincter ani muscle, &c.

I have presented a knowledge of the different methods of operating here described, to many of the first surgeons of this city, all of whom have given it their high approbation, at the same time their thanks to the author; several of them have introduced it into their lectures and demonstrated it to their classes; among whom I may mention Professors Velpeau, Nélaton, Jobert (de Lamballe), Ricord, and Chassaignac. And more, M. Velpeau has offered to allow the author to perform, in the amphitheatre of La Charité, the first operation of this nature which will be presented in his wards. By invitation of M. Michou, one of the surgeons of La Pitié, the author demonstrated, upon the cadaver, his different methods of operating, before a number of invited spectators and a large class of students; and in his succeeding lecture the professor spoke of it in the highest terms, and extended the same invitation that M. Velpeau had done.

After an operation, in which the bladder is involved, a catheter must be introduced and worn, so that no urine may collect, which,

* American Journal of Medical Sciences, January, 1852.

by distending the organ and coming in contact with the pared borders of the fistula, would prevent union. If the operation does not involve the bladder, the urine need only be drawn off at regular intervals by means of the catheter. For the first mentioned purpose, M. Charriére Son has had the following form of catheter made after my design, which may be worn with more comfort and less chance of being displaced than the ordinary instrument. (See figure 2.) It is a modification of the one invented and employed by Dr. Sims. The instrument, as I have modified it, is composed of silver, between three and four inches in length, and curved somewhat in the form of the letter S, that its extremity may not come in contact with the wound, and, by bruising it, interfere with the healing process. Its short length also prevents its making injurious pressure against any part of the wall of that viscus. The vesicular extremity (D), for the distance of an inch and a half, is furnished with four rows of holes, opposed to each other, of a line or more in diameter. About an inch and a half from the last holes, towards the vulvar extremity, are placed two rings (E), by which the catheter is secured in position by tapes attached to a band encircling the body. The vulvar extremity (F) is made very oblique, to facilitate the dropping of the urine, and around this extremity is placed a shoulder (G), above which is tied the neck of a gum elastic bag capable of containing a pint and a half of fluid, having at its opposite and depending sides another neck, to which is attached a stopcock, by which the bag may be emptied without disturbing the catheter, or any inconvenience to the patient. This urinary bag may be very conveniently supported by means of the suspensory bandage through which the stopcock is made to protrude. By this arrangement the following advantages are secured:—The catheter need only be removed often enough to be kept free of mucus and phosphatic accumulations, and the disposition to their deposit will be much lessened by preventing the entrance of air into the bladder through the catheter by this means. Also, by the use of the urinary bag the disgusting odor arising from the decomposition of the urine, in an open vessel, is prevented, as well as the inconvenience of such vessel in the necessary position. Again, after the removal of the operative means, it is necessary that the catheter be continued for some time, and great care exercised, lest the weak cicatrix be strained or lacerated. During this part of the treatment the urinary bag will be found especially convenient and necessary, as the patient need not then be confined to her bed. Upon the catheter behind the two rings (E)

may be placed, very advantageously, a disk of gum elastic, the size of a franc, which will prevent the pressure of the rings against the soft parts of the patient ; and by the thickness of this disk of gum elastic, the length of the catheter in the bladder may be graduated, the organ always being much reduced in capacity, by reason of the loss of substance it has sustained, or its contracted condition, from being empty for a longer or shorter time.

The results of the author's investigations and deliberations upon the subject of Vaginal Fistulæ, as here embodied, will be read before the Academies of Medicine and Science, at one of the approaching sessions. The author also intends publishing, before long, a memoir upon the subject of Fistulæ in general, and their treatment.

On the Disease affecting the Inmates of the National Hotel, at Washington, D. C.

[No disease which has prevailed during the past Winter has excited more general interest, professional as well as popular, than that which appeared at one of the largest hotels in Washington, at a time when that city was crowded with strangers. Its causes have not been apparent or easily discovered, and at this time the opinions of physicians are divided upon the subject. *Miasm*, or more definitely speaking, *foul air*, has been blamed by some, while by others metallic poison has been suspected as the agent, and that it was administered intentionally has been intimated in some quarters. At the last meeting of the Academy of Medicine, of this city, a paper upon the subject was presented by Dr. James Wynne, of Baltimore, and will, we are sure, be read with interest by our subscribers, to whom we have the pleasure of presenting it by the courtesy of Dr. Wynne. We are also under obligations to the same gentleman for other papers collected by him, and not read at the meeting of the Academy.—*Eds.*]

It is a matter of public notoriety that, during the months of February and March, many of the inmates of the National Hotel, at Washington, were seized with an alarming, and in some instances fatal disorder, which, at the moment, gave rise to the most painful suspicions as to its origin and development. Some months have now transpired, during which the hotel has been taken possession of by the municipal authorities of Washington, and after an examination and report by the Board of Health, closed as a nuisance. The guests

who were attacked by the disease have returned to their homes in various parts of the Union, and many are still laboring under the effects of the malady, or occasional relapses of more or less violence. The circumstances attending the onset of the disease, as well as its unyielding character, have served to excite public curiosity to an unusual degree, and to set afloat a great variety of rumors, which, if true, should be established, and if false disproved by the careful scrutiny of medical men. It is for this reason that I have brought the subject before this body, in the hope that the discussion which it may give rise to, will elicit from the distinguished members who compose it some solution in which the public mind may feel confidence, and be relieved from that painful distrust under which it now labors.

This hotel, long known as one of the most extensive and fashionable in the Union, and whose guests were ordinarily of the greatest respectability, is situated at the intersection of Pennsylvania avenue and Sixth streets, in a salubrious part of the Capital, and has, up to the period when it became so unfortunately conspicuous, enjoyed an excellent reputation for salubrity. In the latter part of January, during a period of extremely cold weather, Dr. James C. Hall, one of the most extensive and able practitioners of Washington, was called to visit a patient who occupied a room in the fourth story of the hotel, who was affected with diarrhœa, loss of appetite, and irritable stomach. This was one of the first cases of the disease. It was followed, in the early part of February, by many others of a like character in various parts of the house, from the domestics' kitchen to those having rooms remote, and without any connection with each other. The symptoms in all of these cases corresponded pretty nearly with each other, and seemed to indicate a common cause, to which all had been subjected. The attack almost invariably began in the morning, after the patient had retired to rest in apparent health, and was ushered in by profuse operations of a frothy character, accompanied by much flatus. Whenever the diarrhœa was checked by opiates or astringents, it was succeeded by vomiting, which in its turn was suspended by the renewal of the diarrhœa. There was some pain, but not that of acute inflammation; thirst was excessive, and the desire for acid drinks great. It did yield readily to treatment, and was liable to frequent relapses.

The disease abated during the mild weather about the middle of February, and returned with increased violence with the cold weather which set in at the last of the month, and continued into March,

during which time the house was crowded to repletion with guests attracted to Washington by the ceremony of the inauguration of Mr. Buchanan as President of the United States. Dr. Hall saw thirty or forty of these cases, and is clear in identifying the disease of March as the same as that which occurred in the earlier part of the season. Dr. Boyle, who likewise saw a large number of cases of this disease, fully corroborates the statement of Dr. Hall, both in regard to the circumstances under which disease appeared, and the character of the attack. Those who left the house after having contracted the malady suffered equally with those who remained, and so tenacious does it appear to be, that the residents of remote districts in the North and South are even now suffering from relapses, under the most diverse conditions of locality and climate.

Suspicion was naturally first directed to the food served at the table as the offending cause, and at the suggestion of some of the boarders a fresh supply of cooking utensils, tea, sugar, coffee, and milk were obtained. Mr. Alfred F. Goss, the steward, who testified to the above changes in the culinary department before the Committee of the Board of Health, asserted that the copper vessels were well lined and perfectly clean, and in better order than he had ever seen before, although he had been steward at the Revere House, in Boston, for five and a half years. Gautier, the chief cook, and one of the first and greatest sufferers, in his examination declared that the food was always of good quality, that he kept the keys of the meat-box, and that none but the cooks were present when the food was being prepared. All of these cooks, five in number, as well as many of the servants, suffered in common with the guests. At one time so many were indisposed as seriously to interfere with the regular duties of the house.

The testimony of Goss and Gautier in regard to the water, shows that the water tank is built of brick, lined with slate, and so completely closed that it was impossible for a rat or any other animal to enter it. This testimony was further corroborated by the personal examination of the Committee. It further appears, by the evidence of the steward and cook, that the water used when the disease appeared a second time, was procured from a different reservoir from that in use at the beginning of the attack. Upon this point the report states that,—

"Failing to detect the cause of the disease in these sources, the attention of the Committee was next directed to the hygienic condition of the house, and upon this point we have the testimony of Mr.

J. D. Fairbanks, Thomas McDowell, Charles Watson, A. F. Goss, J. T. Ferry, and others, as well as the intelligent observations of Drs. Hall and Boyle."

"Mr. J. T. Ferry, sewer builder, testifies that 'he examined the cellar of the hotel, and found an opening in the southwest corner, connecting with the sewer leading into the street, through which there was continually passing a current of fœtid gas, which nearly extinguished a candle held over the opening.' Previous to the trap being placed at the corner of the street, the current of air, he states, passed from the cellar into the sewer. These cellars are very damp (see A. F. Goss's testimony). Charles Watson, who is engaged in the barber's shop, testified that there is a door opening into the hotel from the shop, which is frequently open ; that he has noticed a disagreeable odor in the shop (similar to that which arises from the sewer at the corner of Sixth and C streets), especially in the morning.

"The construction of the stench-trap at the corner of Sixth street and Pennsylvania avenue, by preventing the gases from escaping into the street, is considered the principal cause of the noxious gases passing into the cellar of the hotel. The boiler in the cellar, according to Dr. Hall, aided in distributing the fœtid gases through the building. In room No. 29 (second story), in which the Committee examined the witnesses, a register was found, which was said to communicate with the cellar, and from this an offensive odor could be distinguished, entering the room. Two of the Committee frequently recognized the offensive odor spoken of by Drs. Hall and Boyle in different parts of the building. The same fact is certified to by Mr. J. D. Fairbanks, Thomas McDowell, Alfred F. Goss, Charles Watson, &c."

"There was no evidence, in the opinion of Drs. Hall and Boyle, of anything like mineral poison having been taken into the stomach ; there was no evidence of inflammation of the intestines. Both concur in regarding the disease as one of "blood poison," produced by the inhalation of a poisonous miasm, generated by animal and vegetable decomposition, which entered the hotel through the sewer connecting with the Sixth street sewer. As a further corroboration of this fact, we are assured that a peculiar and offensive odor pervaded the premises, and which was more decided in the halls than in the water-closets. This odor caused one of the physicians to become nauseated."

All of these facts seem conclusively to show that the food and water were not at fault, and to disprove entirely the supposition that

poison in any shape, or of any kind, had been introduced into either, and had thus been partaken of by the inmates of the hotel. And, indeed, it is remarkable that this suspicion should have been entertained at all, more especially by medical men. It is useless, here, to enter into a description of the symptoms resulting from various poisons. I think that the members of the Academy will agree with me, that none resemble those which characterized the disease developed at this establishment.

Besides, although the number attacked were numerous, yet many escaped altogether, notwithstanding that they partook of food and drink in common with those who were less fortunate. This was especially the case with the lady visitors, among whom the relative number of attacks were less frequent than among those whose apartments were in that portion of the establishment especially appropriated to the use of gentlemen, and who could not have failed to experience some ill effects if they had partaken of bad or poisoned food. Dr. C. T. Jackson, of Boston, who was at Washington during the prevalence of the disease, very justly remarks that, "No chemical or reliable medical evidence has yet been adduced to prove that any one of the persons who were sick with this disease had taken poison of any kind into their stomachs."

Now the question arises, Can disease, presenting the characteristics of the one just described, be produced by putrid exhalations arising from defective sewerage, conjoined to deficient ventilation? If so, without the adduction of new evidence, the endemic must be attributed to this cause.

Dr., afterwards Sir John Pringle, the President of the Royal Society, than whom no man of his day was a more acute observer, in his observations on the diseases of the English troops in Flanders, says that whenever the marsh near which the army was stationed was foul with animal impurities, the soldiers were invariably seized with bowel irritation, amounting even to dysentery. This observation, made by this distinguished army surgeon, has been corroborated by the experience of every one having the medical care of bodies of garrisoned or field troops since his day. The experience of our own army in Florida, and more recently in Mexico, shows the great prevalence and malignity of bowel affections among those who are subjected to putrid exhalations. Nor is this confined to those who are confined to the wretched quarters of the soldiers of an army in time of war, or the illy ventilated apartments of the more wretched in populous towns, but often invades the luxurious dwellings of the more

opulent classes. Dr. Rigby, in his evidence before the Health of Towns Commission, says that he has often been enabled to detect, by the sense of smell, the poisonous exhalations from sewers, in the more fashionable parts of London. He considers the sense of smell as very important to a physician. "A crafty nurse," says he, "may hide much from the eye, but she can conceal but little from the nose of a medical man who is at all experienced in these matters." He is clear in attributing an attack of puerperal fever, which seized the inmates of the lying-in hospital under his charge, to defective sewerage and ventilation. Dr. Guy, of King's College, is equally positive in tracing consumption to the same cause, and Dr. Southward Smith bears ample testimony of its power to produce fever. There are instances in which the attack from this cause assumes one or the other of these forms, and others in which two or more are conjoined. This was especially the case in the Croydon epidemic, which occurred in September, 1852. Mr. Granger, who was sent by the Board of Health to investigate the cause of the outbreak, and who, among other like causes attributed the epidemic to the effluvia which escaped from the gully holes of the old sewers, says, "Besides the attacks of fevers there was a large amount of diarrhœa." Mr. Thompson had 50 cases in his practice, all evidently attributable to, and forming a part of the epidemic. In the Croydon epidemic a leading characteristic of all the cases of fever was diarrhœa, and Dr. Granger says that in this outbreak, gastric disturbance, traceable to putrid effluvia, was uniformly present. A case nearly allied to this is that quoted by Christison, in his work on Poisons, of the school at Clapham :—

"In August, 1831, twenty-two boys, living at a boarding-school at Clapham, were seized in the course of three or four hours with alarming symptoms of violent irritation of the stomach and bowels, cerbraltus of the muscles of the arms, and excessive prostration of strength. . . . A suspicion of accidental poisoning having naturally arisen, the various utensils and articles of food used by the family were examined without success ; and the only circumstance which appeared to explain the accident was, that two days before the first child took ill a foul cesspool had been opened, and the materials diffused over a garden adjoining to the children's playground. This was considered a sufficient cause of the disease by Dr. Spurgin and Messrs. Angers and Saunders, of Clapham, as well as by Drs. Latham and Chambers and Mr. Pearson, of London, who personally examined the whole particulars. Their explanation may be the only rational account that can be given of the matter. But, as no detail of their chemical inquiries was ever published, their opinion

cannot be received with confidence by the medical jurist and the physician, since it is not supported, so far as I am aware, by any previous account of the effects of hydro-sulphuric acid gas."

Dr. Wynne then read the following letter from Dr. Spurgin to Dr. Leeson, extracted from the Metropolitan Sanitary report:

My dear Dr. Leeson:—There are some inaccuracies in Dr. Christison's report, to wit: the date of the occurrence was in August, 1829, not in 1831. The first child I was called to was seized with violent abdominal pains on the night of Thursday, the 13th of August, accompanied by great prostration of strength, ending rapidly in death, for he had expired before my arrival at the house, which was about 6 o'clock on Friday morning. The death was ascribed to severe inflammation of the bowels. You may judge of my surprise on being called to the same house on the following Sunday morning, under precisely similar circumstances, excepting that the second boy died about two hours after my arrival. To all appearance, he was quite well the preceding evening. About 8 o'clock in the morning, another boy was reported sick, in pain, and prostrate; then another and another, until I believe every boy in the school, with but one exception, was attacked before 9 o'clock. The alarm became very great and extended to all the neighborhood. I was unremittingly engaged in directing the measures that were pursued to combat the sickness, diarrhœa, and faintness. No description can convey an idea of the scene. The parents of the children, that could be summoned to the spot, the friends of others, and several female assistants, were rendering such aid as they could, but under great agitation and alarm, which it was extremely difficult to control. By 1 o'clock, the state of the children was such that it was thought desirable to send specially for Drs. Latham and Chambers, who arrived about 3 o'clock, and after their examination of the children, they gave it as their opinion that there was but little hope for the recovery of *thirteen* of the number; and, indeed, such was the degree of prostration, with an absence of pulsation at the wrist, coldness of extremities, and sinking and pallor of countenance, that no other conclusion could be formed. However, by our perseverance in restorative measures, by the exhibition of calomel and opium, by hot fomentations, and poultices applied to the abdomen, by mustard cataplasms to the feet, reaction was at length established, and a rapid recovery ensued in all, excepting the two patients before mentioned, who happened to be the sons of the master of the school.

The post mortem examination was, of course, a matter of great

interest to every medical man present, and particularly to myself, who never could assign all the importance to inflamed patches of the lining of the alimentary canal which has been the fashion in my day; for I regard them as effects rather than causes. The interior surface of the intestines presented here and there an irritated condition, but not so the stomach; and consequently I could not conceive that there had been any deleterious mixture with the food.

As I had the immediate professional charge of the school, it was to my great satisfaction that I was able to disperse the children to their respective homes by 9 o'clock on the following morning. Several of the patients remained under my care for several days afterwards; and it was this that afforded me the opportunity of tracing back to the most probable cause the mischief, by questioning one of the most intelligent of the boys to this end; from whom I learned that on the Tuesday preceding, viz: August the 11th, an old drain was accidentally discovered on some workmen digging near the house; and as the inmates had often been annoyed by noxious smells, it was at once determined to have the drain emptied, and the contents of it spread over a part of the garden, for the sake of manuring it. In this operation the boys were engaged for that afternoon, in common with the workmen; and though the stench was bad enough, yet none were deterred by it from lending a helping hand. One of the ushers of the school was affected on the Sunday for several hours, but not so grievously as were the children. The common workmen escaped the mischief; but the two little boys who fell victims to the noxious exhalation, were observed to be particularly busy in the work of removal.

That this exhalation from the drain was the cause of the so-called cholera, I cannot entertain the slightest doubt; but what the nature of the exhalation was, whether sulphuretted hydrogen gas, or any, to us, unknown gaseous agent, I cannot say. A remarkable circumstance to be noted is, the length of time it lay dormant in the system, answering, as it did in this respect, to the malaria, whence come remittent and intermittent fevers; but whether sulphuretted hydrogen gas, as such, can, on its tainting the animal economy, present this singular phenomenon, is more within your power than in mine to determine. To me it is a question whether its effects are not more immediate and determinable. The instance in question presented not a positively *typhoid* feature; the darkened tongue, the trembling limb, the suffused and heavy eye, the oppressed brain, the muttering, the delirium, the subsultus, were wanting. The disorder

had more the character of a virulent English cholera, and as bearing upon the circumstances likely to favor the spread of the Asiatic form of cholera, I think the instance here presented is one of weighty consideration, because, tainted as the animal fluids may become by exhalations from drains and various filthy accumulations, they may be rendered less able to resist a more virulent taint like that which visited Europe in 1832–1833. In conclusion, allow me to observe, that the sanitary regulations now contemplated, and which are about to be quickly acted upon, desirable as they are, will yet lose much of their power, if unaccompanied by careful efforts on the part of every individual of the community to be themselves cleanly in their persons and habits, and especially in attending to all those rules of diet, regimen, and exercise, which are necessary to the maintenance of a healthy condition of body.

You may, my dear Sir, make what use you please of the above observations, or of any portion of them. We cannot but have one object in view in this most important inquiry, and this object is in faithful hands with yourself, as can at all times be testified by

Yours, with respect and regard,

JOHN SPURGIN.

Also the following interesting communication, addressed to him by Dr. Hall, of Washington, D. C. :—

WASHINGTON, May 4, 1857.

DR. JAMES WYNNE,—*Dear Sir:*—Your letter of the 2d inst., received to-day, admits only of a brief and hurried reply. First, as regards the drainage of the city: The greater portion of it is superficial. The paved gutters are sufficient to carry off the water, but they are often foul from deposits of sand, soil, and trash, which are not as carefully and promptly removed as they should be. Still, I do not think they are decided causes of disease. The streets intersecting Pennsylvania Avenue, between the Capitol and the President's house, have in their centres capacious brick sewers, with openings which were not guarded by traps till last Fall. These sewers empty into the canal; have from the avenue to the canal but a very slight fall; receive the drainage from the streets, yards, and cellars, and from the water-closets of the large hotels, and some private houses, and are only cleansed after a heavy fall of rain. The effluvia from them is often most offensive and abundant. The National Hotel stands upon an alluvial soil, which at no very remote period was probably a marsh, and stands only a few feet above the tide level. The foundation of a large addition to the building, made a few years

since, rests, I am informed, on timber. Its cellars, offices, wash-house, kitchen, privies, &c., &c., drain into a large sewer in the adjoining street. This sewer has a very insufficient fall, and serves two large hotels, three or four large livery-stables, a public bath-house, and a number of restaurants. The vents into this sewer were not, in my opinion, properly guarded in the hotel. At all events, one very large opening was found, not protected at all, and through which a most offensive air passed into the building. Beneath the ladies' breakfast-room, with an old and cracked floor, in a dark, damp, and close cellar, with much of the ceiling broken off, stood a large steam boiler, and the air in that room was always most offensive. There was no proper ventilation in any part of the house.

The "general number of guests in the house" I can only guess at, but I should think it may have been from three to four hundred. Perhaps one-fourth of these were attacked, including the successive arrivals. I have reason to think that I attended more than any other physician, and the greatest number I had at one time was eleven, I did not have under my care altogether more than forty. Many of the victims did not consult any physician, but took their own remedies or the medicine prescribed for their friends.

"How many have died?" and "what were the organic lesions?" No one, to my knowledge, has died in this place, nor have I heard of the death elsewhere of any patient that I saw. Hence the censure cast upon us by some all-wise editors that we have not made and reported our autopsies, is rather unreasonable. I was not the house-physician, or the physician of the proprietors; but at an early period I advised them to employ some one competent to examine and analyze the food, drink, and every possible source of disease. I had not the skill to do this myself. They did employ Dr. Antisell, who is *not* a practising physician, and the result of his inquiries you will find in the paper I send you to-day.

The disease was, in my opinion, *sui generis*. A man would go to bed in his usual health; he would have his usual rest. At daylight he would have an urgent call to stool; he would forcibly eject a pint of fluid of the consistency and color of boiled custard, yeasty and fermenting, usually in the beginning, without the least tenderness or pain, or vomiting. There would be no fever, and little or no constitutional disturbance of any kind. By breakfast time he would probably have four to six operations, and then usually there would be a reprieve. The next morning the same scene would be enacted, and then at a period varying from two days to a week, the stomach

would be affected with nausea, vomiting merely of the ingesta, intense thirst, and loathing of food. If the disease persisted, tenderness and pain in the bowels, with an irritated pulse, would come on, but not in all the cases, for many had the diarrhœa for weeks without one sign of any inflammatory action. The most singular feature in the disease was the tendency to frequent relapses. Patients who had left the house would apparently get well and remain so for two, or even three weeks, and then, without any fresh exposure or any known adequate cause, have a recurrence of all the symptoms.

The cause of this singular endemic is hid in mystery. At first I naturally attributed it to something in the food or drink; but when I found that persons living on every variety of diet, and others who frequented or slept in the house, but neither eat or drank there, were equally affected; while on the other hand, many who lived, eat and drank there, escaped, I was driven to some other explanation. I could not believe that it was any mineral poison acting as a chemical irritant, for these reasons:—

One man would be attacked after eating a single meal; another only after eating *many* meals, and others ate and drank indiscriminately and with impunity through the whole period of the disease. The bowels were primarily and mainly affected, and the stomach secondarily, not violently, and not invariably; whereas I should expect a mineral poison to have expended its force in the first instance, and principally on the stomach. The symptoms, as denoted by the stools (which were never bloody, or mucous, and rarely serous), the degree and kind of pain, the pulse, the skin, the nervous sympathies, &c., were not such as would be produced by any mineral or vegetable poison with which I am familiar. And lastly, the abatement and cessation of all the symptoms with apparent recovery, and then their recurrence without any fresh exposure, is incompatible with the idea that the disease was an inflammation, softening, and ulceration of the mucous membrane. I have not time to state many other reasons that suggest themselves; I would merely remark that the organic lesions revealed in the cases of Mrs. Adams of New York, and the Hon. Mr. Montgomery of Pennsylvania, may have been merely secondary results of a functional disease. My own conjecture, expressed with doubt and diffidence, is that the endemic diarrhœa of the National Hotel was caused by some noxious miasm, of the chemical nature of which I am utterly ignorant. And we can say no more of the causes of cholera infantum, cholera asphyxia, endemic dysentery, and intermittent fever, to say nothing of puerperal fever, and all the

exanthemata. What chemist has yet caught and analyzed the *materies morbi* of those diseases. One fact I must mention. For the last two weeks of February the weather was very mild; the windows and doors of the hotel were thrown open, and during that time no new cases occurred. About the first of March the weather became very cold; the house was closed, and the disease broke out with increased violence Again, some attributed their exemption to the habit of sleeping with open windows all the time. One thing, however, jostled my theory and has staggered me a good deal, and that is, that many persons who partook of but a single meal were seized! Could the miasm have affected or adhered to food? the water of the house I drank copiously without any ill effects. J. C. HALL, M.D.

SELECTIONS.

Quinine as a Prophylactic. By Dr. WILLIAM BALFOUR BAIKIE.

One of the greatest improvements in tropical medical practice, of late years, has been the employment of quinine, not as a curative agent, but as a prophylactic or preventive. For this we are mainly indebted to the exertions of Dr. Bryson, R.N., who also recommends not merely that it should be taken while in unhealthy localities, but that its use should be continued for a period of fourteen days after leaving such places, or during the average extent of the term of incubation. Attention to this has largely decreased both the mortality and the sickness of the African squadron to such an extent, as fully to justify our belief in this property of quinine. While up the Kwora, or Niger, in 1854, I had ample opportunities for testing this virtue, and must unhesitatingly record my belief in its existence. While in the Delta, and in swampy districts, it was regularly administered and its use continued for about a fortnight afterwards; and among twelve Europeans hardly any sickness occurred, during a stay of four months in what has hitherto been considered a most unhealthy river. It was taken the first thing in the morning to the extent of three or four grains, and occasionally it was repeated in the afternoon. On getting up at day-light a kind of craving for it was experienced, and after it had been swallowed it appeared to act as a slight stimulant; and, from my own individual experience, I can affirm, that, after swallowing my morning dose, all the languor of a close, damp, tropical night, was dispelled, and I felt fit for any kind of duty; or in the evening, after a hard day's work in a hot sun, nothing was so refreshing, so exhilerating, as this invaluable drug. So marked were its effects, that if Dr. Hutchinson placed, as he usually did, a bottle of the aqueous solution on the engine skylight,

even the black portion of our crew used to come unbidden and help themselves to a little. As a prophylactic, the most pleasant mode of administration is in the form of solution in wine, either in port or in sherry, the latter being, perhaps, preferable. I have used bebeerine in a similar manner, and found it to answer very well. Sherry is employed for the "quinine wine" now supplied to the navy, which has for several years been made on the large scale with amorphous quinine. The only troublesome effect which I have observed from the continued administration of quinine is a tendency to rather obstinate constipation, but this can easily be guarded against by the occasional use of a laxative, such as a seidlitz powder. I am unable to say whether bebeerine is apt to produce a similar tendency. I had one opportunity of noting the action of a poisonous dose of quinine, as our steward helped himself one day, by mistake, to a wineglassful of a strong solution, containing about two drachms. This produced speedy vomiting, with great depression, weakness, and fluttering of the pulse, and epigastric pain. Stimulants had to be given, and, after the depression had passed off, relief was obtained by the application of counter-irritation over the stomach, and the internal administration of morphia, but headache and ringing in the ears continued for nearly two days.

It has been suggested that the constantly repeated use of quinine in this manner might, probably, gradually weaken its good effects, or render the recipient more or less insensible to its action. But such was not my experience; it seemed to be quite as active and potent at the last as at the first, and when the system was, so to say, tolerably saturated with the drug, the few cases of remittent fever which then supervened were of a very mild nature, and readily yielded to increased doses.—*Edinburgh Medical Journal.*

Glycerine as a vehicle, solvent or excipient in pharmaceutical preparations. By W. Lauder Lindsay, M.D.

I am indebted to the kindness of Mr. G. F. Wilson, of the firm of Messrs. Price & Co., London, for a most elegant, and, I venture to predict, a most useful series of medicinal preparations, in which glycerine is the solvent basis. They are as follows:—

1. *Glycerine with Quinæ Sulph.*—1½ grains to the fluid ℥i. A clear fluid, of a beautiful straw color, and intensely bitter taste.

2. *Glycerine with Quinæ Iodid.*—1 gr. to ℥i. A clear fluid, of a beautiful amber color, and intensely bitter taste.

3. *Glycerine with Ferri et Quinæ Citr.*—5 grs. to ℥i. A dull, opaque fluid, of a greenish yellow color, and strongly metallic or styptic taste.

4. *Glycerine with Ferri Iodid.*—5 grs. to ℥i. A clear fluid, of a beautiful lemon yellow color, and strongly ferruginous taste.

5. *Glycerine with Ferri Protocarb.*—8 times the strength of the Mist. Ferri Co. P. L. Opaque fluid, of a dark leek-green color, and pleasantly ferruginous taste.

6. *Glycerine with Ferri Ammonia-Citr.*—8 grs. to ℥i. Opaque fluid, of a dark iodine color, and slightly ferruginous taste.

7. *Glycerine with Ferri Perphosph.*—5 grs. to ʒi. Opaque fluid, of a milk-white color, and slightly ferruginous taste.

8. *Glycerine with Tannin.*—5 grs. to ʒi. Dull fluid, of a greenish color, and intensely, but pleasantly, styptic taste.

9. *Iodurettted Glycerine.* A syrupy fluid of an intensely dark iodine color; apparently of greater strength than the ordinary tincture.

10. *Essence of Senna prepared with Glycerine.* A fluid resembling in color and taste the best syrup of senna, such as that made by Duncan and Flockart of Edinburgh.

11. *Essence of Rhubarb prepared with Glycerine.* A fluid resembling syrup of senna or the above preparation in color, and having the peculiar bitter taste of rhubarb.

12. *Glycerine with Lemon Juice*—in the proportion of equal parts. Opaque fluid, of a pale milk-white color, with a pleasantly acidulous taste, and a strong flavor of lemon.

13. *Essence of Lemon prepared with Glycerine.* A clear fluid, of a beautiful straw-yellow color, and with a delightful taste and flavor of lemon.

14. *Essence of Cinnamon prepared with Glycerine.* An opaque fluid, of a port-wine color, having a pleasant taste and flavor of cinnamon.

15. *Essence of Cloves prepared with Glycerine.* An opaque fluid, of a dark reddish-brown color, having a pleasant taste and flavor of cloves.

All of these preparations are like syrups. The solutions of the salts of quinine and iron are most elegant tonics, and very suitable for prescribing among the higher ranks of society; the combination with tannin has already been used as a styptic with success; iodurettted glycerine must take the place of the tincture of iodine as an endermic application; the essences of senna and rhubarb are most suitable purgatives for children and ladies; the combination with lemon juice might, if sufficiently cheap, become of great service in the navy, and, as it is, it may with advantage be used in private practice as an anti-scorbutic and refrigerant; and the essences of lemon, cinnamon, and cloves, will doubtless become favorites alike with the pharmaceutist, the cook, and the confectioner. Several of the above preparations, and others of a similar nature, have for some time been advertised by various enterprising London druggists. Of these preparations, I may mention in particular the iodide and bromide of iron (dose about 1 to 2 fluid drachms), the iodide of iron and quina, and the iodide of quina, in solution in glycerine. Glycerine has been found as good a preservative of the metallic iodides as syrup, and I think is destined to supersede the latter as an excipient. *Iodurettted glycerine* has also been lately much used. The *Medical Times*, in its notices to correspondents, recommends it to be made by dissolving 1 part of iodide of potassium in 2 parts of glycerine, and then causing this fluid to take up or dissolve 1 part of iodine. Ordinary solvents take up a comparatively small

quantity of iodine, with the single exception of alcohol ; and we have already seen that the tincture of iodine has several disadvantages, from which ioduretted glycerine is free. The ethereal solution is much stronger and more effectual, as an endermic application, than the tincture. It is sufficiently strong to blister the skin, and its action is attended or followed by severe pain. But it has the great disadvantage that the ether rapidly evaporates. In painting ioduretted glycerine over bronchoceles, bubos, strumous swellings, housemaid's knee, or otherwise applying it endermically, it is recommended to cover the affected part with gutta percha sheeting, oil skin, or some such material. This is not so much to prevent evaporation, as to prevent the liquid being removed by and staining the clothes of the patient, or the bed-clothes, if he is confined to bed. In this strong, or concentrated state, ioduretted glycerine has been used with success in lupus. The applications of glycerine in pharmacy are only being slowly developed. There is strong ground for believing that glycerine will ere long supersede, in many cases, alcohol and syrup, as solvents or excipients, in pharmaceutical preparations.—*Edinburgh Medical Journal.*

Lupulin in Affections of Urinary Organs.—Dr. Herzfelder, physician to the Jewish Hospital in Vienna, places great reliance in this drug in inflammatory and painful affections of the urinary passages. Administered in doses of from one to two grains six times daily, he finds that it diminishes the increased sensibility, and allays the pain, without producing stupor, cerebral congestion, or constipation. Its virtues in spermatorrhea first induced him to make trial of its powers. He has found also that, in less doses, it is the speediest remedy for curing nocturnal enuresis in children.—*Zeitschrift der Gesellschaft der Aertze zu Wein*, 1856. 3 and 4.

Hyosciamin.—Professor Schroff details some experiments which he has been making with the essential principle of henbane. He considers that it will be very serviceable as a sedative for cough, and as a means for procuring quiet sleep. As a hypnotic, it is inferior to morphia, especially when the sleeplessness is owing to severe pain ; but, unlike that drug, it promotes rather than retards the action of the bowels. He recommends its administration (mixed with powdered sugar), in doses varying from one-sixtieth to one-twentieth of a grain. He says that one-tenth of a grain is too large a dose. It has one very curious property, viz : more power in producing dilatation of the pupil than any other drug with which we are acquainted. There is no medicine which has such a rapid, intense, and continued action upon the iris. It is distinguished from atropin and daturin in being very soluble in water, which renders its application in the form of solution less irritating to the eye than daturin and atropin, which are only soluble in alcohol. If the solution of hyosciamin is intended to be kept for a considerable length of time, it is well to add a little alcohol to it, to preserve it from losing

its virtue. The formula for such a solution given by Schroff, is one part of hyosciamin, ten parts of alcohol, and one thousand parts of water.—*Wien Wochenblatt*, 25-27. June, 1856.

Nitrate of Silver in Infantile Cholera.—Professor Mauthner places reliance on no other remedy in urgent cases of cholera in children. He orders an enema, every hour, of 2 grs. of the salt in ℥j. of distilled water, with a little oil; and he simultaneously administers, every four hours, a tablespoonful of a solution of 1 gr. of the nitrate in ℥ij. of aq. distill. The children take this mixture easily, and seldom vomit. The author admits, that in advanced cases, where the constitution of the blood is changed, even this treatment will be of no avail.—*Journal für Kinderk*, 5 and 6. 1856.—*Edinburgh Medical Journal.*

A New Anæsthetic.—At a recent meeting of the Medico-Chirurgical Society of Edinburgh, Professor Simpson stated that he had found the *Hydruret of Amyl* to possess strong anæsthetic properties. The hydruret of amyl was, like amylene, one of the many compounds of the organic radical amyl. The hydruret was discovered several years ago by Dr. Frankland of Manchester, who thought that if it could be applied in any way practically, as for lighting or other purposes, it would be found procurable at a cheap rate. It is colorless, and the lightest liquid known; it is tasteless, or nearly so. It is, besides, a very permanent compound, resisting the action of the strongest sulphuric acid, and of the most powerful oxidizing agents. It has a fruity agreeable smell, somewhat like that of chloroform, but weaker; whilst amylene, the other amylic compound shown by Dr. Snow to be anæsthetic, had, according to M. Gerhardt, the odor of putrid cabbage, "*de choux pourris.*" The hydruret of amyl with which Dr. Simpson made his experiments, was manufactured for him by the Messrs. Smith, Chemists, Duke Street.—*Edinburgh Medical Journal.*

On Infra-Mammary Pains. By PROFESSOR SIMPSON.

A local limited pain under the left mamma, more rarely under the right, is a species of suffering which is not unfrequently seen in the female sex, and it has been alluded to and described by various authors. Usually the seat of the pain is limited to a part not more extensive than a crown piece. Sometimes it spreads further, and circularly around the side. It is apparently seated in the soft parts covering the ribs, and principally in the integumental coverings. Often it co-exists with uterine disease. Sometimes it persists for weeks, months, and years, occasionally recurring in fits, more generally of a chronic, and more permanent nature. Many means have been suggested for its relief and treatment; as cupping and counter-irritating the corresponding portion of the vertebral column; applying leeches, blisters, sedatives, etc., to the affected part. Latterly, in a considerable number of instances, I have injected the subcu-

taneous tissue at the pained part with ten or twenty drops of the common solution of the muriate of morphia, or with a watery solution of the bimeconate of morphia, of the same strength, according to the plan ingeniously suggested by Dr. Alex. Wood for the cure of neuralgia. The results have been in most cases successful beyond my previous hopes. I have seen the pain at once disappear in a number of instances in which it had previously persisted for various lengths of time. In most a single morphia injection has sufficed; in some it required to be repeated twice or oftener. The instances which have not yielded to this treatment have been relatively very few in number, compared to those in which it has succeeded; and the measure is so simple and so generally effectual as, I believe, to deserve the attention of the Society.—*Edinburgh Medical Journal.*

HOSPITAL REPORTS.

Bellevue Hospital.

The Liquor Ferri Sesquinitratis, has been made use of recently in two cases in Dr. Barker's service, with very good results. This preparation of the metal appears to be more readily assimilated than almost any other, and to its tonic properties adds a decided degree of astringency, which make it very available in broken down constitutions, where there is an exhausting diarrhœa. The first of these cases is one of anæmia, in a woman twenty-two years of age, resulting from a hæmorrhagic condition of the uterus, following confinement, which drained the system of its vital fluid, rather by a prolonged oozing from the uterine mucous membrane than by any profuse and rapid loss of blood, and also from a diarrhœa accompanying it. On admission to the Hospital, her condition was one of extreme prostration; she had frequent attacks of syncope; her face was of marble pallor, not even the lips, tongue, or palpebral conjunctivæ evidencing the slightest degree of sanguification. She had a troublesome diarrhœa, and extreme irritability of the stomach, so that not only was the blood becoming daily more impoverished by the flow from the alimentary canal, but it was very difficult to submit to the process of digestion, food which would supply that loss, even if the assimilative powers of the system had been in a state to make use of it when prepared for their action. There were then four indications—1st, to check the drain; 2d, to place the stomach in a condition to retain food; 3d, to give that food in as large quantities and of as

generous quality as could be borne; and, 4th, to give with it some article which would present to the blood, in larger quanty than could be done by ordinary nourishment, that which the whole appearance of the woman most clearly indicated to be wanting, *Iron*.

The first of these appeared to be better answered than in any other way, by occasional enemata of the watery Extract of Opium in ice-water.

℞. Ext. Opii Aquos. - - gr. vi
Aq. - - - - ℥ss M.
S. A teaspoonful, in half a teacup-full of iced-water, immediately after a stool.

Opium by the mouth was not well borne. The gastric irritability was conquered, and the tone of the organ improved by alternating small doses of morphia, with the nitromuriatic acid.

℞. Morphiæ Sulphatis - - gr. i
Aq. - - - - ℥ij M.
S. A teaspoonful every two hours.

℞. Acidi Nitromuriatici - - ℥i
S. Ten drops three times a day.

The muriatic tincture of Iron was not tolerated by the stomach. This treatment had been pursued for a fortnight when she was first seen by Dr. Barker, and the above mentioned preparation prescribed.

℞. Liq. Ferri Sesquinitrat. - ℥j
S. Fifteen drops three times daily, after eating.

Although the tone of the stomach had somewhat improved at that time, she had still occasional attacks of diarrhœa and vomiting, and the pallor of the mucous membranes was as marked as ever. The remedy appeared to agree well with the stomach, and to exercise a decided control over the frequency of the evacuations. Her appetite improved rapidly, her spirits became more buoyant, her mind clearer, and now, three weeks since the commencement of the treatment, a faint rosy tint on the lips and tips of the fingers, like the first blush of morning, begins to herald to her the dawn of returning health.

The other case is one of chronic dysentery, of two years standing, in a woman thirty-five years of age, originally supposed, in consequence of a cough which preceded it, and ceased, after it had become established, to be tubercular.

During this entire period she has averaged from eight to sixteen stools per diem, generally containing mucus, rarely, for a year past, blood. She is very much prostrated, confined to her bed, quite anæ-

mic and despondent. Suffers constantly from abdominal pains, and tenderness along the colon. Has taken, seriatim, all the opiates and astringents of the Pharmacopiœa, and has been under every regimen that can be devised, including the "raw meat chopped fine," on which she lived for several weeks. She has finally settled down on Opium pills, of one grain each, which she takes ad libitum,—her average being rather above than below a dozen in the twenty-four hours. She was put upon the Sesquinitrate, in the same doses as the other patient. The immediate effects of the article were most remarkable. After taking it for four days, her stools were reduced to two in the twenty-four hours, and the day following she had but one ; a state of things which she declares has not existed for two years. It is hardly to be expected that this remarkable amelioration of her sufferings can be, to this extent at least, permanent. Still it is sufficient to show a wonderful adaptability of the remedy to these cases of chronic diarrhœa with anæmia, and promises the patient decided relief. Dr. Barker's principal experience in the article in such cases, was derived from the treatment of several officers of our army who had contracted diarrhœa during the Mexican campaign, which appeared to be uncontrollable.

A case recently occurred in the Lying-in ward, particularly illustrative of the utility of continued and persevering efforts, in attempting the resuscitation of an asphyxiated child. The labor was a rapid one, the os dilating early, and was completed with the forceps by Dr. Warren, in consequence of a prolapse of the cord, in which, however, all pulsation had ceased before the delivery was effected. The child was to all appearance lifeless. Its muscular system was entirely relaxed, its surface dusky and bluish ; there was no respiration, and the heart-sound could not be detected. Notwithstanding these unpromising appearances, the child was immediately plunged alternately into hot and cold water, artificial respiration was made both by the mouth, and by Marshall Hall's plan. This consists in placing the individual on the side and rolling him gently and at regular intervals on the abdomen, and from the abdomen back to the side, thus producing alternate pressure and relief from pressure on the thoracic walls, and that of a degree of severity directly proportioned to the size of the individual. Friction to the body and limbs was used, with turpentine, brandy, and finally with chloroform. The last mentioned article appeared peculiarly effective, in restoring the capillary circulation. The first respiration did not take place until ten minutes after the treatment had been commenced, and there

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was an interval of at least two minutes before the second. In the course of twenty minutes, respiration took place six times in the minute, and from this time it continued with regularity until about fifty minutes after birth, when the function was fully established and the treatment discontinued. The points in the case are the persevering and unremitting use of means in the face of all reasonable ground for expectation, to which undoubtedly the child's life was due, and the efficacy of the chloroform as a revulsive and excitant.

The cases of pneumonia which have been admitted to the wards this Winter have been usually of the asthenic type. Indeed it is very rarely that a vigorous phlegmasia presents itself at the Hospital, and especially when the pulmonary tissue is the seat of attack.

The contra-stimulant method of treatment, by tartrate of antimony and general blood-letting, would inevitably prove fatal in most of the cases, and very frequently stimulation of the most active kind is required from the first entrance of the patient; though it must be allowed that the disease has generally reached its second stage before the patient enters the Hospital.

The following cases will illustrate the mode of treatment usually adopted:—

A young woman, 25 years of age, of somewhat intemperate habits, and with the history of incipient phthisis, after having drunk hard for several days, and been much exposed, was seized with rigors, followed by fever, with urgent dyspnœa, and some pain in the chest. She was brought to the Hospital the second day after this attack. Her appearance was then expressive of immediately-impending suffocation; the body was bent forward, the eyes starting from their sockets, the face livid, the lips purple, and the nostrils pinched, their alæ working violently. The pulse was 140 in the minute, weak, and compressible, the respiration 50, and labored. The physical signs were: Dulness on percussion over the lower half of the right lung, and over the summit of the left lung, in front. Fine crepitus heard in both these situations. Bronchial râles over other parts of both lungs. Dry cups were immediately applied, thirty to the front of the chest, soon followed by as many behind. Carbonate of ammonia was prescribed.

℞. Ammoniæ Carb. - - - ℈ij
Aq. Cinnamoni - - - ʒiv

S. A table spoonful at a time. In five grain doses every hour, with half an ounce of brandy, to be given at the same time.

Evident relief was experienced on the application of the cups,

which were repeated in fewer numbers on the following day. From the moment that these measures were adopted, the improvement was steady. On the third day the countenance had lost its anxious expression, the pulse was fuller and stronger, and had gone down to 120, while respiration, though still frequent, 32 in a minute, was easy. The stimulus was continued day and night, at this rate, for four days, when it began to be gradually diminished. By the end of a week, respiration had fallen to 20, and the pulse to 80, dulness on percussion had very much diminished. At the end of the third week she was discharged cured.

Another case occurred in a woman 72 years of age. It was a pneumonia of the right lung, the upper three-fifths of the lung being consolidated at the time of admission. She was laboring greatly for breath. Her tongue was dry and brown, her skin hot, and her entire condition such as to render the prognosis extremely grave. The stimulant plan of treatment was immediately adopted, and pushed to its fullest extent, with the gratifying and unexpected result of the gradual, but steady and complete restoration of the patient's health, notwithstanding her extreme age.

Examples like these might be multiplied almost indefinitely from the Hospital records, and although the tone of the system of Hospital patients generally is undoubtedly much lower than that of the average class of private patients, there is little doubt that a useful hint may be gathered from them, with regard to the more decided early and fearless use of stimulus, and careful avoidance of extreme depression, even among patients whose habits and circumstances in life render them better able to withstand the onset of disease.

Two fatal cases of chorea have occurred in the wards this Spring, and as deaths from this disease are rare, a brief history of them may be of some interest. The first was in a girl, 15 years of age, naturally of irritable temperament, but vigorous constitution, and heretofore in excellent health. Two months before admission she was noticed to have an occasional twitching of the shoulders and tossing of the head, which was, however, attributed to childish petulance, her temper at the same time becoming more irritable. During the following month the choreic symptoms were gradually developed, and an occasional falling of the lid of the left eye was observed. At one period she complained of a violent pain in the head, which was followed by a considerable discharge (probably purulent) from the nostrils. Her memory now began to be somewhat deficient, and she complained of a sensation of numbness in the wrists. About

the end of the second month she was seized with a violent pain in the right ears, from which she continued to suffer as long as she had the power of communicating with others. In three days from this attack, her convulsive movements become so violent as to be dangerous to herself. They were at this time still paroxysmal in their character. This feature had entirely disappeared by the time she was brought to the Hospital; the convulsions being then constant, universal, and distressingly violent. She was then very much prostrated, her pulse was small and quick, and tongue dry and brown along the middle. Chloroform exercised a decided control over the convulsions, and by it, in conjunction with morphia, a little sleep was procured. During the first twenty-four hours after admission, both food and stimulus were taken by the patient in small quantities, but subsequently to that deglutition became impossible. On the third day, the nervous energies seemed to be completely exhausted; the convulsions gradually grew less and less violent, and with their cessation, life was evidently ebbing. She died quietly the following morning. On post mortem examination the brain presented no abnormal appearance. The spinal cord exhibited small transverse corrugations, and papular elevations at intervals.

The second case occurred in a boy, of precisely the same age. Although in not quite so desperate a condition when brought to the Hospital, he became rapidly worse, and died in the course of a few days with almost precisely the same series of symptoms, and in the same manner as the former case. It was impossible to obtain any history of his disease previous to admission. A third case of the same disease has been presented in the person of a young pregnant woman, and with this peculiarity, that she is invariably attacked with it during pregnancy. Considerable benefit was derived in this instance, after other ferruginous preparations and Fowler's Solution had been tried without effect, from the use of the Valerianate of Iron, in grain doses, three times a day, in combination with Extract of Hyoscyamus.

An epidemic of Puerperal Peritonitis, or, more properly, Puerperal Fever, as the disease had fastened itself indifferently on the Peritoneum, the uterus externally or internally, the ligaments, or the ovaries, has lately made its appearance in the Lying-in Ward. Its peculiar characteristic has been its extreme insidiousness. The very slight degree of local disturbance, which seemed to be required to set up a general decadence and rapid destruction of the vital power. The entire want of local symptoms,

pointing to this local disturbance, and the fearfully rapid manner in which the powers of nature succumbed to the poison in the blood, whether that be considered to be merely pus, or the more subtle principle on which the contagiousness of the disease depends, and which must be looked to as its first cause. For that there *is* a blood poisoning, the history of this epidemic would scarcely seem to leave a doubt. An idea of its character will be best given by a recital in brief of a few of the cases. The first that occurred was in a woman, 28 years of age, the mother of two children, who was taken in labor outside the Hospital, and was reported to have lost a considerable amount of blood before her entrance, which took place on the 28th of March. After admission the hæmorrhage was very slight. Her child was born in four hours, dead, but evidently at full term. Its death was supposed to be due to the reported hæmorrhage. She experienced, after the labor, certainly no more, perhaps rather less, than the usual degree of circumscribed tenderness over the uterine region, and no general abdominal tenderness. Her pulse, however, did not recover its quietness and tone, as it should have done after the excitement of labor passed off; but its weakness and frequency were attributed, as well as an occasionally hot skin and flushed cheek, which soon became permanent, to exhaustion and slight reaction, following the loss of blood, and so created at first no apprehension. Upon the fourth day after her confinement, her condition was remarkably comfortable. She complained of no pain or tenderness, or even uneasiness, had no chill or rigors, but was extremely prostrated, had a flushed cheek and anxious countenance, and a pulse, never below, often considerably above 120 per minute. Indeed, in her case as in nearly every one of them, a remarkable and startling feature was the utter unconsciousness of danger, and apathy even when made aware of it. Their condition could be likened only to that of one who has received some fearful injury, which has so completely destroyed the correspondence between the nervous centres and the periphery, that while the bystander looks on his mangled limbs and crushed body with horror, he himself feels no pain, apprehends no danger, and is even amused at the concern evidenced by others on his account. The same state of the sentient faculties is noticed in certain kinds of mental alienation, particularly in delirium tremens, as in the case on record at the New York Hospital, where a sailor went stumping it over the floors of the wards with the jagged end of his fractured tibia sticking into the boards every step, greatly diverted at his success in that remarkable mode of

progression. So in these cases, the brain appeared utterly to fail in its duties as sentry on the watchtower of vitality, and to take no cognizance whatever of the fearful amount of disorganization which was going on within the limits of its jurisdiction. And these doomed women lay, with death written on their faces in that unmistakeable expression of Puerperal Fever, with death creeping through their veins, as evidenced by that fatally frequent, quick, and flickering pulse, with death crushing down their nervous energies, and turning their strength to utter weakness, and yet all unconscious of death, without a pang or an anxiety, smilingly answering to the Physician's inquiry, that they were "very well," "first rate," hoping soon to "go home," or to "go to the country," and wondering that the Doctor came to see them so often, and gave them so much medicine.

Of two or three of the cases at least, this is not in the slightest degree an overdrawn picture, and they all of them bore more or less resemblance to it. In the present case there was neither constipation nor diarrhœa, but on the afernoon of Monday, April 6th, she had a stool resembling, according to the nurse's description, laudable pus. Notwithstanding the free administration of stimulants, the pulse steadily increased in frequency, and diminished in force, while the respiration became daily more hurried, and the countenance more anxious. Shortly after the dejection just mentioned, vomiting came on, the matter thrown off being a dark greenish fluid, and continued steadily until death on the following morning.

The autopsy revealed metro-peritonitis of a severe grade. The abdominal cavity contained both pus and serum; the uterus and parts adjacent were covered with false membrane and patches of softened tissue, and the cavity of the uterus contained a dark mucous fluid which appeared under the microscope to consist of a little pus, blood, and epithelium. Its lining membrane was in a state of extreme congestion. A little pus was found in the pelvis of the right kidney, but in no other distant organ.

The next victim was a woman 25 years of age, the mother of one child, who was delivered of a living child after a labor of eleven hours. Shortly after was attacked by a diarrhœa, of some severity, which continuing, was soon accompanied by a quick, frequent pulse, and a flushed cheek, with occasional copious perspirations. She complained of no pain, had no abdominal tenderness, no marked chill, and her extreme hopefulness and cheerfulness served greatly to mask the anxious expression of her countenance. Little alteration took

place, save a gradual loss of strength for ten days, when she for the first time vomited a small quantity of dark greenish somewhat grumous fluid. This was continued at intervals for two days, when it became very frequent, her extremities grew cold and clammy, her pulse rose rapidly, and she died in a state of collapse early the following morning. No autopsy.

In neither of these cases was milk secreted more than two days. In other instances the attack was more marked and noticeable, and being met by appropriate remedies was frequently overcome, and the life of the patient preserved. The following is one in point:

The patient was 23 years of age, the mother of one child, of short, stout, plethoric habits, and restless nervous temperament; her labor was short and easy, her child living and vigorous. Twenty-four hours after confinement, was attacked by a chill, which was soon followed by decided tenderness in the hypogastrium, and quickened pulse, heat of skin, and great restlessness. Milk continued to be secreted, and the lochial discharge was not materially altered or diminished. Notwithstanding the free use of opiates, and a local depletion, the symptoms had so much and so rapidly increased in urgency, that by 9 P. M. of the following day, her pulse was strong, full, and bounding, numbering 140 beats per minute; the heat of skin was excessive, the abdominal tenderness marked, and the respiration hurried. At this time the use of the Tincture of the Veratrum Viride was commenced, the remedy being administered in doses of ten to twenty drops every hour until a decided impression began to be made on the pulse, when it was given in smaller quantities. The morphia was continued, only sufficiently to procure sleep and lull pain. The result of this mode of treatment was that, by six o'clock the following morning, only nine hours after its initiation, the pulse was beating quietly and regularly *sixty* times per minute, and it was held at or near this point during the entire course of the disease, which terminated favorably in about a week. This combination of the two remedies, the morphia as a nervine and anodyne and cerebral stimulant, acting at the same time on the respiration, with the veratrum as a sedative and equalizer to the circulation, seems indeed, if the disease be appreciated and attacked sufficiently early, to be almost irresistible.

At the same time that the first cases of this disease were in progress in the Lying-in ward, two young women in distant wards, under treatment, the one for chronic nephritis, the other for the results of acute rheumatism, were strangely enough attacked within two days

of each other with idiopathic peritonitis, of a very severe grade, and died after illnesses of three days each. In the former case the amount of inflammatory action, as evidenced by the autopsy, had been considerable, and showed that this was not the first attack. In the latter it was slight.

There are now under treatment two very aggravated cases of abscess, following Crural Phlebitis after parturition. In one of them, one gluteal region, in the other both are the seat of enormous collections of pus, which evidently burrowed down among the fibres of the muscle. In the one, the right leg corresponding to the gluteal abscess, was the seat of extensive suppuration, from the middle of the thigh down to the ankle, the pus being comparatively free, and in large abscesses with well defined walls, while in the other the left leg was similarly affected, except that there was more œdema, and the pus was more generally infiltrated throughout the cellular tissue. The treatment was of course supportive generally, with free incisions, followed by bandaging and compresses locally.

During a month past, several interesting operations have been performed before large classes.

By *Dr. Wood*, removal of a sebacious tumor from the scalp, of tumor from the vulva, &c.

By *Dr. Stephen Smith*, amputation of thigh, for railroad accident, ditto for necrosis; *Syme's* operation on the foot (the second performed by him at the Hospital this Winter); for syphilitic disease and ligature of carotid of left side; for malignant disease of the antrum.

EDITORIAL AND MISCELLANEOUS.

The first article of this number calls for a little explanation. From Dr. Barstow's introduction it will be seen that about six months ago Dr. Hays published an article in reply to one we printed three years since. Though full of errors, as Dr. Barstow clearly shows, the infallibility assumed by our amiable and respected contemporary admits of no correction of errors or acknowledgment of mistake, and therefore this article, which we now publish, could not be admitted by him. This is a queer course for an editor to pursue, according to our notions, but we do not need to comment upon it. The last number of the same periodical has a part of our article published in it, as we are aware under some pressure brought to bear

upon the "*redaction*" of it, but still published. To be sure, it was quoted as having appeared "in a journal of limited circulation;" but now the readers of this journal of *unlimited* circulation have arrived at the point where our readers were three years since, unless, indeed, some of them take both journals. If we remember, there were about two thousand copies of the journal printed at that time and circulated. So that this, with the additional circulation given to the paper by copying into other journals, has enabled truth, for once, to get a little the start. We hope it will keep it, notwithstanding the unlimited circulation of our confrère is brought to the aid of falsehood.

The facts in the case are, we suspect, that the abhorrence of chloroform, which some of the profession in Philadelphia labor under, and which, till late, has excluded it from their hospital, if indeed, it is now admitted to be used there, together with the idea that he has caught us napping, tempted Dr. Hays to publish what he would, if left to his unprejudiced judgment, not thought of inserting. Well, instead of catching us, he has got caught himself, and we really must be excused for laughing at his unfortunate predicament. If he had had the courage to acknowledge himself in error, we should have been much better pleased; but that is of no importance to him,—and should have been spared the trouble of this explanation to our readers. Justice to a valuable medical agent, and justice to a worthy medical gentleman, both have induced us to insert this paper, rejected though it was by the great Unlimited.

If we thought it would do any good, we would suggest to our loving brother that he has come pretty near being caught in other traps, set with a similar tempting bait, and would advise him to use a little more caution. We certainly do hope that the next time he will make the "amende honorable" himself, so that we may be spared lengthy explanations.

—On Ascension Day (which fell this year on the 21st of May), the chapel of St. Luke's hospital in this city was opened with religious services. It is between the two wings of the building, occupying that portion which in most similar institutions is appropriated to the use of the officers and attendants. These are provided for by rooms situated upon the first floor while the second and third floors of the wings are occupied by the wards. The height, length, and width of these, admirably adapt them to the use of the sick. A full description of them is, however, postponed till they are complete for the purpose they are designed to fulfil. The Rev. Dr. Muhlenberg, to

whose exertions the institution is largely indebted for its progress hitherto, gave an interesting statement of its condition and prospects, and this, with appropriate religious services, in which the Rt. Rev. the Provisional Bishop and other clergy took part, constituted the exercises of the occasion. From this address we learn that it is hoped that the hospital will be opened for the reception of patients by, or soon after, St. Luke's day (October 18th), till which time liberal contributions will be needed to equip it properly and completely.

In speaking of the peculiar feature of the hospital, that is, the religious, Dr. Muhlenberg said "it was right that the chapel should be opened before the wards, and that it should occupy the centre of the building, for Christianity preceded hospitals, these growing out of that, and still owing their value to it, and depending on it."

The institution was built by, and is under the management of, the Protestant Episcopal Church. As Dr. Muhlenberg said, "it was built to do good to the souls as well as the bodies of men. But no religious test will be required of applicants ; nor will the hospital be used as a means of proselytizing the sick. All will be admitted, provided only that they do not reject the ministrations of the Church. The religion taught will be Christianity in its true Catholicity, whole and undefiled."

Our own high opinion of the prominence given in this institution to religious teaching does not need to be repeated. The full discussion which we gave last year to hospital nursing, is we hope fresh in the minds of many of our readers. No doubt that in a year's time St. Luke's, with its two hundred patients, will have fully proved the correctness of the principle of its foundation, and the foolishness of separating so widely as usual the cure of the body from the cure of the soul.

—The American Medical Association met at Nashville according to announcement, and we had hoped to be able to give in this number a full account of the proceedings. Prevented from going ourselves, and deprived of our usual means of information, we must wait till the excellent medical journal of that city comes to us. We learn verbally that the session was a delightful one ; that the profession and people of Nashville exerted themselves to make everything pass off pleasantly, and succeeded perfectly. We do dare to repeat all the good things we have heard of it. The closing entertainment was a *ball*. We only wish it had been possible for us to be there.

The president was Dr. Eve. The vice-president, from this part of the country, was Dr. Reese *vice* Dr. Charles Hooker, who tried to get

it. Two session schools were discussed with some plainness of speech. Hasty graduations, too, were talked of, and some rather tough yarns told. The next session is to be at Washington.

Is there any impropriety in our asking if it is necessary, or even wise, to make surgeons only into presidents? Why not give some chance to those who do not devote themselves to this speciality, but cultivate medical science without this limitation?

—New York seems, at the present time, to present an excellent opportunity for any one who can go into the publication of medical books. Enterprise, and ability in this business would be largely rewarded. This we say, having no book of our own to offer, but because we happen to have known of several books of value, some from Europe, which, of late, have here in vain sought a proper and desirable publisher. High percentages are not so important items to authors as business capacity, energy and promptness.

—The 12th annual meeting of the Association of Superintendents of American Institutions for Insane, was held in this city during last month. This Association is composed entirely of medical gentlemen, having charge of institutions for the treatment of the insane. The number of such institutions, both public and private, upon this continent, is fifty-seven, giving a total of more than 10,000 patients. These were represented in this association by about forty members. The sittings extended through four days,—the first two being entirely devoted to the reading and discussion of papers on the medical treatment of the insane, the causes of insanity, and subjects having a psychological bearing. The last days were partly passed in visiting the Asylums for the insane in and about New York. Sanford Hall at Flushing, the New York City Asylum at Blackwell's Island, and the Bloomingdale Asylum were visited, and the delegates were pleasantly entertained at each of these institutions.

From the rapidly increasing number of this sadly afflicted class of patients, the movements of this Association become endowed with unusual interest. It is gratifying to witness the change in opinion and action as regards the coercive treatment of the insane, and it is with pleasure we call attention to the views expressed by one of the members in a paper upon the medical treatment of insanity, which elicited a warm discussion. It is too generally thought that little or no medical treatment is necessary or of avail in this form of disease, but if it be considered as a disease at all, why should it not in many instances be amenable to a proper medical treatment.

Among other papers read at the meeting, we present a running abstract of a few as reported by the secretary of the association.

Dr. Tyler, of the New Hampshire Asylum, read a paper on the "Care of the Violent Insane," which was followed by an interesting discussion in regard to the kind and amount of personal or muscular restraint which is best calculated to promote the comfort and restoration of the insane of all classes. The prevailing opinions of the members of the association were strongly to the effect that no class of patients should be confined in cells, but in chambers as large and as inviting in their construction as those for the convalescent; that the seclusion of the violent insane, by day, should be infrequent, and generally of the briefest practicable duration; and that neither muscular restraint nor seclusion should ever be subject to the judgment and control of subordinate officers or attendants.

Dr. McIlhenney read a paper on "some of the causes that are productive of insanity," which gave rise to a wide and important discussion of the subject of hereditary causes of insanity and those thought to be incident to that deterioration both of mental and physicial constitution which is incident to the progress of modern civilization.

Dr. McFarland, of the Illinois State Hospital, read an interesting paper upon the mental and moral condition of persons who, in various instances, have been saved to give an account of their experiences, after protracted contemplation of death from exposure and starvation. The cases of the horrid displays of selfishness and crime that occurred during the siege of Jerusalem, the plague in London, and also after the wreck of the French transport Medusa, were contrasted with the interesting experiences of a party of coal miners, who, for more than two weeks, were buried in the inner chamber of a mine in the valley of the Muskingum river, Ohio. It appeared that these persons during their confinement, from which they had abandoned every hope of release, maintained a self-sacrificing attachment for each other most marked and interesting, thus disproving the oft-repeated assertion, that the social bond is merely one of selfishness and supported only by considerations of social accountability. It appeared that long abstinence from food and their despair of release brought on a peculiar form of insanity in two of them, marked by a great heightening of the power of the imagination. During the existence of this peculiar insanity their imaginations were filled with visions of richly spread feasts, of rare dainties, and of the repeated presence of their friends. They were finally released, after more than fourteen days of imprisonment, and the paper read was in a great measure quoted from their own words, recorded just after their rescue.

This curious psychological effect of prolonged hunger upon the imagination meets its parallel in the narrative of Lieut. Strain, who with his companions in the Darien Expedition, passed through all the horrors of a living death, from gradual and prolonged abstinence from food. Our readers who may have seen the graphic account as given by Mr. Headley in Harper's Monthly, will find another instance in this paper by *Dr. McFarland.*

Dr. Gray read a narrative of the personal history of John Wesley Lyman, a homicide, who killed Cornelius Carman, on the 28th day of December, 1856, near Fort Hamilton, L. I., and who was absolved from trial on a preliminary investigation into his state of mind, and who is now a patient in the State Asylum at Utica, and unquestionably insane. This man had been partially insane for many years and thought himself subject to spiritual influences and impositions. This case was regarded by *Dr. Gray* and the members of the association generally to be an example of a class of cases which are frequently thought to exist, and who are allowed to go at large, subjecting the best citizens of the community to the hazards of homicide.

Fears were expressed by *Drs. Kirkbridge, Butler, Fonerden,* and others, that patients in our institutions subject to homicidal impulses were allowed to use axes and other tools, which they are liable to use as weapons of personal violence.

Drs. Butler and *Jarvis* related the cases of persons subject to insane or homicidal impulses, who had warned their friends against giving them a liberty which they at times considered themselves liable to abuse.

Dr. Ranney, appointed last year to report upon the medical treatment of insanity, read a paper upon that subject. It stated that in insanity no new faculties are created, but those already existing are modified by the conditions of exaltation, depression or perversion, while the type of the different varieties of disease may be found in the normal state of the mind. This consideration affords important aid in distinguishing one form of mental disease from another. I shall first refer to acute mania. The physiological type of this disease is given more nearly in anger marked by violence than in any other state of mind. The leading characteristics are impassioned moral and intellectual exaltation—the one exhibited by perversion, the other by delusion—the rapid flow of ideas, violent gesticulation, disposition to overturn or destroy the furniture of the room, sleeplessness, and a wild expression of the eye and countenance, betray-

ing great disquiet of mind. Undoubtedly the word acute mania recalls a certain grouping of symptoms, and conveys more accurate notions of the condition than would the minute description of an individual case ; since by abstraction, the essentials in particular instances have been selected and combined to form the general idea. As for the medical treatment, a careful examination must be made into the general condition of the system as well as the functional disturbance of any organ that might affect the brain. The success of the following treatment depends much upon the care exercised in this duty. The patient, so far as possible, must be excluded from all excitement. In most cases the condition of the stomach and bowels are disordered, to correct which an active cathartic should be prescribed.

The report went on to specify the daily medical treatment of the patient. If it continued at the time of admission, the patient be emaciated and apparently prostrated, either morphine or opium is given directly after the warm bath. Under these circumstances a full diet ; and if with restlessness and high excitement, an anæmic state of brain is believed to exist, a supply of meat rich in fat is liberally furnished ; beer and milk punch take the place of other drinks. My attention was first called to the use of quinine by a paper read before this association three years ago by *Dr. Tyler* ; since then I have often used quinine in cases of the recurrent form with decided success. In many the lucid intervals was prolonged, the paroxysm less severe, and in a few instances complete recovery was the result.

Melancholia, the lypomaina of Esquirol, is another form of mental disease readily recoguized. The elementary type is found in fear, sorrow, or grief, as exhibited by a mother in the loss of a child, or when impending calamity hangs over her offspring. The peculiar marks which distinguish this affection are exaltation of the sentiment of sorrow, entire concentration of mind on one idea or class of ideas, and an inability to direct the attention to anything not immediately connected with that which wholly absorbs the mind. It is frequently dependent on some bilious or uterine derangement, and in the selection of medicines attention should be directed particularly to this fact. The report further described the medical treatment and symptoms of this and other forms of insanity.

A question arose about the use of antimony and blood-letting to quiet vicious or highly excited cases of insanity. It was discussed with some warmth, but the general opinion was against their use.

Dr. Kirkbridge said that though he had treated about 3,000 patients, he never used blood-letting for insanity ; where he had seen it used he thought its effect was very injurious.

—Some months since we gave our readers some items of medical interest from St. Petersburg, now we quote from Lieut. Burton a sketch of medicine in Cairo :—

After lodging myself in the Wakálak, my first object was to make a certain stir in the world. In Europe, your travelling doctor advertises the loss of a diamond ring, the gift of a Russian autocrat, or he monopolizes a whole column in a newspaper, feeing perhaps a title for the use of a signature ; the large brass plate, the gold-headed cane, the rattling chariot, and the summons from the sermon, complete the work. Here there is no such royal road to medical fame. You must begin by sitting with the porter, who is sure to have blear eyes, into which you drop a little nitrate of silver, whilst you instil into his ear the pleasing intelligence that you never take a fee from the poor. He recovers ; his report of you spreads far and wide, crowding your doors with paupers. They come to you as though you were their servant, and when cured turn their backs upon you for ever. Hence it is that European doctors generally complain of ingratitude on the part of their Oriental patients. It is true that if you save a man's life he naturally asks you for the means of preserving it. Moreover, in none of the Eastern languages with which I am acquainted, is there a single term conveying the meaning of our "gratitude," and none but the Germans have ideas unexplainable by words. But you must not condemn this absence of a virtue without considering the cause. An Oriental deems that he has a right to your surplus. "Daily bread is divided" (by heaven) he asserts, and eating yours he considers it his own. Thus it is with other things. He is thankful to Allah for the gifts of the Creator, but he has a claim to the good offices of a fellow creature. In rendering him a service you have but done your duty, and he would not pay you so poor a compliment as to praise you for the act. He leaves you, his benefactor, with a short prayer for the length of your days. "Thank you," being expressed by "Allah increase thy weal!" or the selfish wish that your shadow (with which you protect him and his fellows) may never be less. And this is probably the last you hear of him.

There is a discomfort in such proceedings, a reasonable, a metaphysical coldness, uglily contrasting in theory with the genial warmth which a little more heart would infuse into them. In theory, I say, not in practice. What can be more troublesome than, when you have obliged a man, to run the gauntlet of his and his family's thanksgivings. "To find yourself become a master from being a friend," a great man where you were an equal ; not to be contradicted, where shortly before every one gave his opinion freely. You must be unamiable if these considerations deter you from benefiting your friend, yet, I humbly opine, you still may fear his gratefulness.

To resume. When the mob has raised you to fame, patients of a better class will slowly appear on the scene. After some coquetting about "etiquette," whether you are to visit them or they are to call upon you, they make up their minds to see you, and to judge with their eyes whether you are to be trusted or not; whilst you, on your side, set out with the determination that they shall at once cross the Rubicon,—in less classical phrase, swallow your drug. If you visit the house, you insist on the patient's servants attending you; he must also provide and pay for an ass for your conveyance, no matter if it be only to the other side of the street. Your confidential man accompanies you, primed for replies to the "fifty searching questions" of the "servants' hall." You are lifted off the saddle tenderly, as nurses dismount their charges, when you arrive at the gate, and you waddle up stairs with dignity. Arrived at the sick room, you salute those present with a general "peace be upon you!" to which they respond, "and upon you be the peace and the mercy of Allah, and his blessing!" To the invalid you say, "There is nothing the matter, please Allah, except the health;" to which the proper answer—for here every sign of ceremony has its countersign—is, "may Allah give thee health!" You then sit down and acknowledge the presence of the company by raising your right hand to your lips and forehead, bowing the while circularly; each individual returns the civility by a similar gesture. Then inquiry about the state of your health ensues. Then you are asked what refreshment you will take: you studiously mention something not likely to be in the house, but at last you rough it with a pipe and a cup of coffee. Then you proceed to the patient, who extends his wrist, and asks you what his complaint is. Then you examine his tongue, you feel his pulse, you look learned, and—he is talking all the time—after hearing a detailed list of all his ailments, you gravely discover them, taking for the same as much praise to yourself as does the practising phrenologist, for a similar simple exercise of the reasoning faculties. The disease to be respectable must invariably be connected with one of the four temperaments, or the four elements, or the "humors of Hippocrates." Cure is easy, but it will take time, and you, the doctor, require attention; any little rudeness it is in your power to punish by an alteration in the pill, or the powder, and, so unknown is professional honor, that none will brave your displeasure. If you would pass for a native practitioner, you must then proceed to a most uncomfortable part of your visit, bargaining for fees. Nothing more effectually arouses suspicion than disinterestedness in a doctor. I once cured a rich Hazramaut merchant of rheumatism, and neglected to make him pay for treatment; he carried off one of my coffee cups, and was unceasingly wondering where I came from. So I made him produce five piastres, a shilling, which he threw upon the carpet, cursing Indian avarice. "You will bring on another illness," said my friend the Haji, when he heard of it. Properly speaking the fee for a visit to a respectable man is 20 piastres, but with the rich patient you begin by making a bargain. He com-

plains, for instance, of dysentery and sciatica. You demand 10*l.* for the dysentery, and 20*l.* for the sciatica. But you will rarely get it. The Eastern pays a doctor's bill as an Irishman does his "rint," making a grievance of it. Your patient will show indisputable signs of convalescence: he will laugh and jest half the day; but the moment you appear, groans and a lengthened visage, and pretended complaints welcome you. Then your way is to throw out some such hint as

"The world is a carcass, and they who seek it are dogs."

And you refuse to treat the second disorder, which conduct may bring the refractory one to his senses. "Dat Galenus opes," however, is a Western apothegm: the utmost "Jalinus" can do for you here is to provide you with the necessaries and the comforts of life. Whatever you prescribe must be solid and material, and if you accompany it with something painful, such as rubbing unto scarification with a horse brush, so much the better. Easterns, as our peasants in Europe, like the doctor to "give them the value of their money." Besides which, rough measures act beneficially upon their imagination. So the Hakim of the King of Persia cured fevers by the bastinado; patients are beneficially baked in a bread-oven at Bagdad; and an Egyptian at Alexandria, whose quartan resisted the strongest appliances of European physic, was effectually healed by the actual cautery, which a certain Arab Shaykh applied to the crown of his head. When you administer with your own hand the remedy—half-a-dozen huge bread pills, dipped in a solution of aloes or cinnamon water, flavored with assafœtida, which in the case of the dyspeptic rich often suffice, if they will but diet themselves—you are careful to say, "In the name of Allah, the compassionate, the merciful." And after the patient has been dosed, "Praise be to Allah, the curer, the healer;" you then call for a pen, ink, and paper, and write some such prescription as this:—

"A

"In the name of Allah, the compassionate, the merciful, and blessings and peace be upon our Lord the Prophet, and his family, and his companions one and all! But afterwards let him take bees-honey and cinnamon and album græcum, of each half a part, and of ginger a whole part, which let him pound and mix with the honey, and form boluses, each bolus the weight of a miskal, and of it let him use every day a miskal on the saliva. Verily its effects are wonderful. And let him abstain from flesh, fish, vegetables, sweetmeats, flatulent food, acids of all descriptions, as well as the major ablution, and life in perfect quiet. So shall he be cured by the help of the King the Healer. And the peace."

The diet, I need scarcely say, should be rigorous; nothing has tended more to bring the European system of medicine into contempt among Orientals than our inattention to this branch of the therapeutic art. When an Indian takes cathartic medicine, he prepares himself for it by diet and rest two or three days before its

adhibition, and as gradually after the dose, he relapses into his usual habits; if he break through the regime it is concluded that fatal results must ensue. The ancient Egyptians, we learn from Herodotus, devoted a certain number of days in each month to the use of alteratives, and the period was consecutive, doubtless in order to graduate the strength of the medicine. The Persians, when under salivation, shut themselves up in a warm room, never undress, and so carefully guard against cold that they even drink tepid water. When the Afghan princes find it necessary to employ Chob-Chini (the Jinseng, or China root, so celebrated as a purifier, tonic, and aphrodisiac), they choose the Spring season; they remove to a garden, where flowers and trees and bubbling streams soothe their senses; they carefully avoid fatigue and trouble of all kinds, and will not even hear a letter read, lest it should contain bad news.

When the prescription is written out, you affix an impression of your ring seal to the beginning and the end of it, that no one may be able to add to or to take from its contents. And when you send medicine to a patient of rank, who is sure to have enemies, you adopt some similar precaution against the box or the bottle being opened. One of the Pashas whom I attended—a brave soldier, who had been a favorite with Mohammed Ali, and therefore was degraded by his successor—kept an impression of my ring in wax, to compare with that upon the phials Men have not forgotten how frequently, in former times, those who became obnoxious to the State were seized with sudden and fatal cramps in the stomach. In the case of the doctor it is common prudence to adopt those precautions, as all evil consequences would be charged upon him, and he would be exposed to the family's revenge.

Cairo, though abounding in medical practitioners, can still support more; but they must be Indians, or Chinese, or Maghrabis, to thrive. The Egyptians are thoroughly disgusted with European treatment, which is here about as efficacious as in India—that is to say, not at all. But they are ignorant of the medicine of Hind, and therefore great is his name; deservedly perhaps, for skill in simples and dietetics. Besides which the Indian may deal in charms and spells—things to which the latitude gives such force that even Europeans learn to put faith in them. The traveller who, on the banks of the Seine, scoffs at Sights and Sounds, Table-turning and Spirit-rappings, in the wilds of Tartary and Thibet sees a something supernatural and diabolical in the bungling *Sie-fa* of the *Bokte*. Some sensible men, who pass for philosophers among their friends, have been caught by the incantations of the turbaned and bearded Cairo magician. In our West African colonies the phrase "growing black," was applied to colonists, who, after a term of residence, became thoroughly imbued with the superstitions of the land. And there are not wanting old English Indians, intelligent men, that place firm trust in tales and tenets too puerile even for the Hindus to believe. As "Hindi" I could use animal magnetism, taking care, however, to give the science a specious supernatural appearance.

Haji Wali, who, professing positive skepticism, showed the greatest interest in the subject, as a curiosity, advised me not to practise pure mesmerism; otherwise, that I should infallibly become a "Companion of Devils." "You must call this an Indian secret," said my friend, "for it is clear that you are no Mashaikh, and people will ask where are your drugs, and what business have you with charms?" It is useless to say that I followed his counsel; yet patients would consider themselves my Murids, and delighted in kissing the hand of the minor saint.

The Haji repaid me for my docility by vaunting me everywhere as the very phœnix of physicians. My first successes were in the Wakálah. Opposite to me there lived an Arab slave dealer, whose Abyssinians constantly fell sick. A tender race, they suffer when first transported to Egypt from many complaints, especially consumption, dysentery, and varicose veins. I succeeded in curing one girl. As she was worth at least fifteen pounds, the gratitude of her owner was great, and I had to dose half a dozen others, in order to cure them of the pernicious and price-lowering habit of snoring. Living in rooms opposite these slave girls, and seeing them at all hours of the day and night, I had frequent opportunities of studying them. They were average specimens of the steatopygous Abyssinian breed, broad-shouldered, thin-flanked, fine-limbed, and with haunches of a prodigious size. None of them had handsome features, but the short curly hair that stands on end being concealed under a kerchief, there was something pretty in the brow, eyes, and upper part of the nose, coarse and sensual in the pendent lips, large jowl, and projecting mouth, whilst the whole had a combination of piquancy with sweetness. Their style of flirtation was peculiar.

"How beautiful thou art, O Maryam!—what eyes!—what—"

"Then why," would respond the lady, "don't you buy me?"

"We are of one faith—of one creed—formed to form each other's happiness."

"Then why don't you buy me?"

"Conceive, O Maryam, the blessing of two hearts—"

"Then why don't you buy me?"

And so on. Most effectual gag to Cupid's eloquence! Yet was not the plain-spoken Maryam's reply without its moral. How often is it our fate in the West, as in the East, to see in bright eyes, and to hear from rosy lips, an implied, if not an expressed, "Why don't you buy me?" or worse still, "Why can't you buy me?"

All I required in return for my services from the slave-dealer, whose brutal countenance and manners were truly repugnant, was to take me about the town, and explain to me certain mysteries in his craft, which knowledge might be useful in time to come. Little did he suspect who his interrogator was, and freely in his unsuspiciousness he entered upon the subject of slave hunting in the Somali country and Zanzibar, of all things the most interesting to me. I have nothing new to report concerning the present state of bondsmen in Egypt. England has already learned that slaves are not

necessarily the most wretched and degraded of men. Some have been bold enough to tell the British public, that, in the generality of Oriental countries, the serf fares far better than the servant, or indeed than the poorer orders of freemen. "The laws of Mahomet enjoin his followers to treat slaves with the greatest mildness, and the Moslems are in general scrupulous observers of the Prophet's recommendation. Slaves are considered members of the family, and in houses where free servants are kept besides, they seldom do any other work than filling the pipes, presenting the coffee, accompanying their master when going out, rubbing his feet when he takes his nap in the afternoon, and driving away the flies from him. When a slave is not satisfied he can legally compel his master to sell him. He has no care for food, lodging, clothes, and washing, and has no taxes to pay; he is exempt from military service and soccage, and in spite of his bondage is freer than the freest Fellah in Egypt." This is, I believe, a true statement, but of course it in nowise affects the question of slavery in the abstract.

A certain amount of reputation was the consequence of curing the Abyssinian girls: my friend Haji Wali carefully told the news to all the town, and before fifteen days were over I found myself obliged to decline extending a practice which threatened me with fame.

—We take the following from the *Medical and Surgical Reporter*, as fairly and forcibly expressing our own sentiments. We do this the more readily because we have also seen some of our articles, for which we paid, not only copied into other journals, but in the process of transfer, finally credited to other sources than our own pages:

We wish our contemporaries to understand that whatever is published in the pages of the *Reporter* is for the benefit of the profession. We claim no copyright protection for anything that sees print from our pen, or through our influence by this channel, and are always happy when exchanges find anything in our pages which they deem of sufficient value to copy—*provided only*, that due credit is given us for whatever is copied. We have had reason to complain, not so much that *no* credit is given for articles copied from our pages, but that it is given to foreign journals, or to some of our excellent American contemporaries.

—Through the courtesy of the editors of the *Nashville Journal of Medicine and Surgery*, we have received advanced sheets of that journal, containing the proceedings of the late session of the American Medical Association. It comes too late to be of use this month. We can only state, that among those appointed on special committees, we find the names of Drs. Jenkins, Corson, Sims, Isaacs, Barker, Reese, Wood, and Prof. St. Johns, all of New York, who are to report at the next meeting. If they all report, as we hope they may, New York will carry off the palm at Washington next year.